# A Lecture

ON THE

# FOSSIL REMAINS OF MAN.

*Delivered at the Royal Institution, Feb. 7th, 1862,*

BY PROFESSOR HUXLEY, F.R.S.

IT is the object of this lecture to explain why those persons who look at Man from a scientific point of view as the great final term of animal development, regard two skulls not very long since discovered as the most venerable and the most interesting specimens of humanity. Of those two skulls (of which casts were on the table), the one belongs to the oldest man of whom we have any knowledge, and the other seems to be the lowest and most degraded in rank of any which can claim humanity. In order to explain how these skulls possess that interest, why one of them may be regarded as the most ancient relic of man, and what are their relations to the existing races, many preliminary details must be reviewed.

And first, a few words as to the terms much used by the students of craniology—High Organization and Low Organization, Elevation and Degradation. The variations to which these terms are applied are best seen in running through the mammalian scale, and comparing the brain-receptacle of man with those of lower animals. Degradation is a relative term. In comparing the brain-case of man with those of the great anthropoid apes, the relative differences which indicate degradation are easily seen. First of all, they differ in absolute capacity: the human cranium has absolutely the greatest contents. In man, we observe that the brain-case is large, the facial element small. In a gorilla the cranium is small, and quite outweighed by the vast development of jaw, and of the massive bony prominences over the orbits and those to which the muscles, and especially those muscles which move the head and jaws, take attachment. In the chimpanzee we have, similarly, a small cranium, large jaw, and very prominent supra-orbital ridges, so that the eyes are deep set, and the face projects, outweighing the head. Thus we observe a gradually-diminishing brain-case, and an increase of facial development and of the bony ridges over the eye, which overhang the face and obscure the characters of the skull. These are the characters of degradation.

It is the more necessary to consider carefully the features of the skull of man in the present inquiry, because we have little else than the skulls left from which to decipher the nature of those early men of whom we speak.

Among the races of men, as they vary, we find a certain approximation to one of two types. If, on the one hand, we take such a skull as that of the negro, we find it long and narrow. The longitudinal diameter greatly predominates, so that the transverse is not more than from six-tenths to seven-tenths of the longitudinal measurement. This type of skull is known as the "dolicho-cephalic" or long-headed; and the negro is of a long-headed race, although long headed only in this technical anatomical sense, and by no means fitted to compete in the contests of life with the "long-headed" and astute members of European society. Examine, on the other hand, the skull of a Turk or a Tartar, and we shall observe another type of conformation. The transverse measurement here more nearly approaches the longitudinal, of which it constitutes from eight-tenths to more than nine-tenths. This is the brachy-cephalic character. These characters have been systematically examined and explained by Retzius. The standard of brachy-cephalism is when the transverse is eight-tenths or more of the longitudinal diameter.

These differences are, however, quite apart from physiological distinctions of character. We may find, for example, two races, such as the Caffre and the Calmuc, with very opposite measurements, but yet very similar in morals and manners, or rather in the total want of both morals and manners.

Next, if we take the skull of a Turk, Greek, or European, we may observe that the face hardly projects beyond the level of the forehead; but in an African skull the face projects, the nose projects, and so does the jaw. These are the characteristic differential qualities, of which the first is known as orthognathism—a character of elevation; and the second as prognathism—a character of degradation. On these the illustrious Camper, with the luminous and far reaching intelligence for which he was distinguished, founded his facial angle, and saw his way to a scientific craniology. The indications so furnished are valuable, but insufficient.

In inquiring into the shape and structure of the skull, ethnologists have at the same time connected these varieties with geographical distribution. It may be greatly doubted whether these varieties of form can be mapped out with the accuracy that has been assumed. But certain broad and sure results have been obtained which may be safely stated. If we take a map of the world, and draw a line from Russian Tartary to the Bight of Benin, at the northern and eastern end we shall find that the brachy-cephalic type prevails. Here are the Mongolian races, the Turks and Tartars, who are the most perfect specimens of brachy-cephalism. At the south-western extremity, the Bight of Benin, are found the dolicho-cephalic people, of the purest negro type. Furthermore, at the north-east extremity of the line, we find orthognathous people, and at the south-western extremity of the line we find the tribes who are most eminently and markedly prognathous. This is one of the broadest and most indisputable truths which ethnology has contributed to science.

This distinction accompanies a prodigious contrast in the conditions of life. At the northern extremity of the line we have a cold, dry, and barren clime; at the southern, a country heated, steaming and crowded with a rank and reeking vegetation. They are the two ethnological poles. In whichever direction you pass, you will find that as you go to the west and the south from the northern pole you get amongst a longer-headed people, with faces more or less projecting; and as you pass towards the north and the east from the southern pole, you become mixed up with tribes gradually approximating to the type of brachy-cephalism. Pass southward from the northern pole, through Cochin China, and we find a gradual tendency to prognathism. Take the other pole, and pass from West Africa northward or to the east, and an opposite tendency to orthognathism is perceived, until we come to a people, along a line from the British Islands to Hindostan, oval-headed, more or less prognathous or orthognathous, and standing half way in the scale.

This is a broad statement, open to many exceptions and variations, but affording a fair view of the cranial characters of the tribes of men as they are distributed over the earth. But has this distribution been always the same? Has the human frame been invariable? Does palæontology, in its application to ethnology, show here also incessant changes and successions? or does it exhibit a uniform state of things through all the ages in which we have traces of man? The answer differs in different regions. There are no materials for saying that Asia was ever inhabited by a different race; none as to the Polynesian Archipelago or the Australian continent; none as to North America or the extreme southern parts of America. But there is a certain amount of evidence that, in the valley of the Mississippi, there once existed a race differing from the recent Indian tribes; that the marvellous race of men who constructed those great mounds, replete with proofs of an older civilization, were of another type. These mounds do not afford much evidence on this matter; but when skulls are found there they are those of a round-headed people. But pass from America to the Old World, and the indications of older races than those now occupying the territory are well marked.

Passing beyond the middle ages, we find everywhere traces on the earth of the great Roman race. Leaving them behind, we come, in Western Europe, to the relics of a long-headed people, the parents of the Germanic race, and allied to the Scandinavian races. They were workers in iron, and their epoch of occupation lasted a long time. Before these we find the evidences of the pre-existence of a smaller race of long-headed men, like the Hindoos; not workers in iron, but in bronze, and who possessed a certain cultivation and domesticated for their use certain animals. Archæologists can go further than this. Behind these there is a third race—a ruder people, in whose tombs are found certain weapons, but no domesticated animals; they are characterized by fashioning for themselves weapons of stone, flint, serpentine, and the like materials. They buried their warriors in the tumuli, sitting, and, each provided with his heavy axe, ready to meet either friend or foe when he passed through the solemn portals of death

into the blessed regions, of which they formed their own rude and savage notions. These weapons were always made of the same stony material, and always ground to a sharp edge. The Danish archæologists, who have examined very carefully the cranial character of the human relics here interred, have found that they belonged to a much rounder-headed people than those of the succeeding period. Mr. Busk, who has personally repeated, and added to, those investigations in Denmark, has confirmed these statements. These skulls are rather below the average bulk, they are somewhat rounded, the transverse amounting to eight-tenths of the longitudinal diameter, and some of them are remarkable for the flatness of the forehead and the prominence of the supra-orbital ridges; the jaws are large, but not prognathous. These characters belong to all the skulls of the men of the stone epoch.

How far is this stone epoch distant from us in time? This is a question always difficult to answer, and to which a cautious reply must needs be given. Distant it was indeed—far beyond any records of history. But some singular means exist of estimating the space of time which separates those races from us. Denmark possesses great peat-bogs in various parts of the country, in which are embedded forests of trees. In the more superficial layers of the soil are imbedded fallen trunks of beech-trees—great trunks of beech like those which now adorn the surface of the country, and are its chief and most graceful decoration. Beneath these beech-trees we come to a lower forest—a forest of oak-trees, fallen with their tops to the centre, of noble size—oaks which had taken centuries to grow, and which have been centuries in the ground. Dig deeper again, and you come to another forest of large and splendid pine-trees—noble trunks of three feet in diameter, of great age and magnificent proportions. Now, in the memory of man there has been nothing in Denmark but beech-trees. Past the memory of man grew and flourished those giant oaks; they had centuries of growth, and for centuries they have been buried. Past these centuries we must look down the vista of ages for the time when the pine-trees stood erect, and slowly gathered their bulk, and fell into the lowest part of this deep peat, to be again covered with the wrecks of succeeding epochs of vegetation.

Now, in the beech forests of the bog we find only traces of the men of iron; amongst the oaks, only of the men of bronze; and amongst the pines, only of the men who worked in stone, and nothing but stone. Beneath the pines we find only peat, and no remains of man of any kind whatever.

What is meant by this lapse, not so much of time, but of facts? We cannot number the ages that saw the rise and fall of these monarchs of the vegetable world, and the succession of these races of man. But great as the range of time thus traversed must have been, it is inappreciable when compared with the chronology of geology. Contrasted with the distance of the earlier geological epochs, it is as the diameter of our earth compared to our distance from one of the fixed stars.

In the time of the men of the stone epoch the physical geography of Europe was as it is now. What was dry land then is dry land now; the caves and fissures which are now high and dry were then high and dry: but beyond that epoch lies the age when the physical features of the land were very different. What is now sea and seashore was then dry land, covered with thick forests; what is now the channel of a river was then far distant from any watercourse. It is in caves such as these that, associated with the bones of mammalians now extinct, and of others that could only have existed under totally different climatal conditions—associated with the bones of the *Elephas primigenius*, the urus, and the great cave-bear, we find those wonderful stone axes which have been lately so carefully examined and discussed—stone axes not polished and ground, but hacked and chipped to a sharp edge. These are the work of human hands, yet they are found in European soil, together with the remains of the mammoth, the cave-bear, the hyena, and hairy rhinoceros. What manner of man was this?

An approximative answer may be given from the result of the examination of the two human skulls which form the subject of the present inquiry. The one of them was found by Schmerling in 1833, in the Cave of Engis, near Liege, in the Valley of the Meuse, high and dry, covered with a deposit of red earth and beneath stalagmite. In the same position, and at the same time, were found associated with these human skulls, bones of the cave-bear and its contemporaries. The skulls of the man and of these early animals were alike in condition, and equally deprived of their gelatine. Now the anatomist cannot, in virtue of his science, enter into any discussion as to the age of these skulls and the age of the strata in which they were found. This is the province of the geologist, and I take the evidence of Sir Charles Lyell on this point. Sir Charles has revisited this cave, and re-examined the ground in which the relics were discovered, and he has staked his reputation as a geologist on the coexistence of the skull of the man with the bones of the animals. I take the evidence of Sir Charles Lyell as conclusive, and assume that the man who made those stone axes was coeval with the brutes, and that here is the skull of one of that race. No axes were found in this precise cave, but the shaped flints which have been found belong to this epoch. In this cave stone flakes were found, but no shaped axes. It is certain, however, that the two belong to the same period. This is the skull of one of those primeval men who flourished when over England ranged the bison, the cave-bear, and the hairy rhinoceros.

What are the characters of this brain-case? What are the deviations from the highest human character of skull? What are its relations to the present race of men? It is a skull not badly shaped; it is long; the transverse diameter is considerably less than the longitudinal diameter; the forehead is fairly and well developed. But the supra-orbital ridges are rather prominent. This is, indeed, a character of degradation; but a vast number of European skulls have the same peculiarity. Schmerling thought the skull one of low race; but others have ranked it high. And Schmerling certainly condemned it on insufficient grounds. Every variety of peculiar dolicho-cephalic skulls may be found in a large collection, such as that of the College of Surgeons; and there may be seen a skull from Mozambique in one case, while opposite to it is an equally degraded cranium of very marked form, indeed one of the worst that I have seen, and which is that of a Celtic Highlander. In fact, extremely exceptional conditions may be observed amongst perfectly recent skulls. I should mention in connexion with the Engis skull, that with the adult skull were found others, some of quite young persons.

The second cranium, known as the Neander-thal skull, was found in a cave in the valley of that name, overlooking the Düssel, a tributary of the Rhine. There is no definite record of the age of this skull. It was buried in the mud, and with it were bones of the extremities. It is the lowest and most degraded of all human skulls. There is a marvellous low forehead; the supra-orbital ridges are enormous, and the skull flat and low; the supra-occipital ridges are not overhung at all. This skull is degraded, and of so low a type that the inspection of a cast of it suggested to me the question whether it was not deformed or abnormally modified. I caused, therefore, a careful examination to be made of the interior of the skull, in order to ascertain whether the lateral sinuses were normally placed. I found that they were, and photographs of the interior of the skull show that the channels and markings of the interior of the cranium have the ordinary relations. The depressed vertex, shallow forehead, and sloping occiput,—the signs of degradation which it bears,—are the indications of the depressed and low character of the brain which it enclosed.

Taking these two skulls of the Engis and Neander-thal Caves as the oldest known vestiges of man, I asked, What are the relations which can be observed between them and the skulls of existing races? Did they belong to two different races? They present, indeed, very strongly-marked differences of shape; and looking at the two skulls of Engis and of the Neander-thal, it would be difficult to find any other two which differ from each other more strongly. But I am not willing to draw any definite conclusion as to their specific variety from that fact. I inquire rather, are not the variations amongst the skulls of a pure race to the full as extensive?

I take the pure Australian as an example for this inquiry; and here we may observe how great is the range of variation in that pure race. The Engis skull may be easily matched by an Australian skull. The following table shows how closely the measurements approximate:—

| | Horizontal Circumference. | Vertical Arc. | Transverse Arc. | Length. |
|---|---|---|---|---|
| Engis ... ... | 20½ ... | 13½ ... | 13½ ... | 7½ |
| Australian ... | 20½ ... | 13 ... | 13 ... | 7½ |
| English... ... | 21¾ ... | 13½ ... | 14 ... | 7¾ |

With the Neander-thal skull, however, we shall not find much more difficulty, for in the College of Surgeons there are a number of skulls of Southern Australians, and one or two of these are wonderfully near the degraded type of the Neander-thal skull. The differences are inconsiderable; and, except that in the supra-orbital ridges and the occipital ridges the Neander-thal skull retains characters of degradation which go beyond those of the South Australian, or any others that I have met,

the resemblance is perfect. Seeing that the variations of conformation in a pure race, such as the Australian, are so great, it cannot be safely inferred that these two skulls, which vary very little more, are even of different races.

It is remarkable that the habits of these men of the age of stone clearly resembled, in several respects, those of the Australian savage tribes. The evidence of the mode of life of the ancient men consists in the great collection of bones found with traces of their industry—bones of the urus, the bison, and other creatures, which they split, to extract the marrow from them, and which they worked up into implements. These bones &c. are found also amongst the piles at the bottom of some of the lakes in Switzerland. The Australian savages similarly utilize the bones of the kangaroo, and their universal weapon is the rudely-fashioned stone axe; while the nearly allied people of New Guinea build houses on piles like those of the ancient population of the Swiss lakes. So that in that most remote epoch, as at the present day, we may believe that savage man was a creature of similar habits and mode of life.

These conclusions have not been arrived at by an easy or uncontested path. Those who believed, from the evidence of their senses, that there were men the contemporaries of the *Elephas primigenius* and his co-mates, had to breast a tempest of stormy opposition. And now that men are generally agreed to accept these facts, we find that this has been after all only a battle of outposts, and that we must go far back beyond even these primeval times to meet with the oldest of men.

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THE

# Lettsomian Lectures on Surgery

FOR THE YEAR 1862.

ON

# PRACTICAL LITHOTOMY AND LITHOTRITY.

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## No. I.

AFTER some preliminary observations relative to the occasion of the Lettsomian Lectures, and on the choice of the subject determined on, the lecturer enumerated various sources of information which had been specially placed at his disposition for the purpose of this course. Very valuable results of practice had been furnished from the hospitals of Norwich, Cambridge, Oxford, Leicester, and Leeds, for which he was deeply indebted to Mr. Cadge, Mr. Humphrey, Mr. Hussey, Mr. Smith, Mr. Paget, and Mr. Nunneley. The results of practice of University College Hospital had been afforded him, by the kindness of his colleagues. And from such sources 1500 cases had been available,—every one of complete authenticity,—forming the most perfect data obtainable in connexion with the subject. Next, the manuscript notes of the late Mr. Crichton, of Dundee, who had left records of the greater number of his cases, containing much matter hitherto unpublished, had been placed at his disposal by his son, Mr. J. R. Crichton—upwards of 200 cases more. Dr. Keith, of Aberdeen, who had already cut or crushed 300 cases of calculi, had afforded him much valuable information. The unrivalled experience of Civiale had been unreservedly communicated, and especially with a view to these lectures. Lastly, to the President himself, as well as to others too numerous to mention, he was under considerable obligations in various ways.

The subject of lithotomy is by no means so simple and so limited at the present day as it was considered to be a few years ago. If we take the writings of our best surgeons of the last fifty or sixty years who have devoted themselves to it, we cannot but be struck with the fact that no other mode of performing lithotomy is alluded to—except for occasional trial or as a matter for speculative remark—than the lateral operation. Most assert that it is the only method which should be employed, except in certain circumstances which are extremely unusual; and it is right to add, that some great authorities appear still to hold the same opinion. The last ten or fifteen years, however, have witnessed some change in this respect in England, and several attempts have been made to remove the stone by other modes of incision; while the surgical practice of Paris has exhibited similar endeavours for a longer period of time. The introduction and progress of lithotrity have, in a great measure, been the cause of this. Lithotrity has achieved such indisputable success with small stones, that those whose habits and inclinations lead them to prefer the use of the knife, have endeavoured to find a method of employing it which should enable them to compete on equal terms with the crushing operation. But where no such feelings exist, the conviction has forced itself on the minds of most surgeons, that the difference between a large stone and a small one is so great, both as regards the prognosis of the case and the difficulty to the operator, that it is impossible to regard even all calculous patients who are to be submitted to the knife as belonging to one category, and as amenable but to one remedy. It is believed to be neither philosophical nor politic to apply to every stone—whether it be no bigger than a nut or as large as an apple—invariably one and the same proceeding. We have learned the importance, in the first place, of ascertaining, before deciding on any operation, the physical characters of the calculus—that is, as regards its size and hardness; and, secondly, the condition of the patient in relation to the state of his urinary organs and his general susceptibilities. Hence the student of our subject, in these modern times, has several modes of lithotomy to understand, and several questions presented to his consideration, in order that he may arrive at a practical solution of the question when a patient comes before him—viz., what is the best operation for this particular case? Hence also it is that, up to the present time, there has been little attempt to offer a comprehensive appreciation of the various methods now in vogue. The choice has hitherto been mainly limited to the alternatives of lateral lithotomy and lithotrity, with recently, in some quarters, the added resources of the median operation. An attempt to supply this desideratum will occupy a considerable portion of the concluding lecture.

The various procedures employed under the name of lithotomy must be ranged in two separate classes—namely:

1st. Operations by which the bladder is reached from the perineum; and among these I shall notice several principal methods, which will sufficiently include minor modifications.

2nd. An operation performed above the pubes, and known as the high or supra-pubic operation.

### I. *Operations performed in the Perineum, or Perineal Lithotomy.*

These are of various kinds, but all may be classified either as lateral or as central operations.

Lateral operations are those which are confined within one of the lateral divisions of the perineum. The incisions are directed between the central and lateral muscles of the perineum. They necessarily approach the pubic ramus, the pubic artery and its branches, and are directed transversely to these latter near to their origin from the arterial trunk. They involve one side of the prostate gland—it may be nearly to its full extent; while in children, and in exceptional adult cases, they go beyond it.

Central operations are those in which the incisions are limited to the central part of the perineum, are made in the line of the raphé itself or transverse to it, and lie mainly between the anus and the symphysis pubis. They do not approach the rami or the great vessels, nor do they run transversely near to the origin of the branches from the pudic artery. In no case do the incisions reach the external limits of the prostate gland. The distinction is important, and has an intimate relation to all that follows. It indicates a principle by which to distinguish and classify all the proposals made for the performance of lithotomy in the perineum.

*Lateral operations.*—There is one proceeding only which will be regarded as the type of this class—namely, the operation at present most generally practised in this country, and universally known as the lateral operation. Although in different hands some of its details vary, the general outline and character are the same in all.

*Central Operations.*—The "median" operation: The stone was removed by a median incision in the perineum, made close to and parallel with the raphé in the old Marian operation during the sixteenth century and long afterwards. But the far greater success which the lateral method realized led ultimately to the total extinction of the Marian. The disastrous results of this procedure were due, however, to the vio-

lent laceration of the neck of the bladder and urethra by which room was made for the extraction of the stone, and not to the median incision of the urethra, which was all that the knife effected in that operation. This distinction was, nevertheless, lost sight of by most lithotomists, until the Italian surgeons, at the commencement of the present century, drew attention by their success to lithotomy in the median line. Mr. Allarton brought it into notice in this country, publishing in 1854 his own method of performing the operation, and it has been generally spoken of here as "Allarton's" or as the "median" operation.

Dr. Buchanan's method, in which he uses an angular staff, first employed by him in 1847, may also be classed under the head of central operations, although it is capable of becoming a lateral operation when required.

The bilateral operation of Dupuytren—so named because the incisions, both external and internal, involved equally each side of the middle line—is, notwithstanding its name, a central rather than a lateral operation.

The medio-bilateral—a combination of the two preceding operations, as the term implies—was made known by Civiale in 1836, having previously been practised by him, and subsequently by himself and others to a considerable extent, in France.

Lastly, the recto-vesical operation, which is a continuation of the median operation from the perineum into the rectum.

*(To be continued.)*

## OBSERVATIONS ON INJURIES OF THE HEAD.

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THE subject of injuries of the head is of such great and general interest to the medical profession, that any facts carefully recorded respecting them must be of some value.

I conceive it to be the duty of everyone who is anxious for the advancement of surgical knowledge, and the elucidation of the many points both in pathology and practice which are at present veiled in doubt or obscurity, to contribute some account, however brief and imperfect the account may be, of any cases worthy of remark that he may meet with, together with such observations as may occur to him during their progress or at their termination.

The study of injuries of the head, in particular, is replete with interest, and probably no class of cases give more satisfaction to those who watch them carefully and discriminatingly. I have selected for relation in this paper a certain number of cases of injury of this kind which have fallen under my notice; and if, in giving them to the profession, I can impart even a trifling portion of the interest which they have afforded me in tracing their course and progress, I shall consider myself fortunate.

Amongst them are several instances of fracture of the skull, both simple and compound; fractures involving the base, or the vault, separately or both simultaneously; some terminating in recovery, and others in death. From the latter I believe we may often learn more than from the former, and therefore I do not hesitate to place on record as many as I can find of sufficient interest in my case books. I have in all such cases appended a detailed account of the post-mortem appearances, so that cause and effect may, as far as possible, be traced in relation to the symptoms and pathology.

I am able to give two cases of punctured fracture of the vault of unusual interest, from the extent of injury inflicted, and from the fortunate result (so rarely met with in this form of fracture) in both instances. Also one in which there was every symptom of fracture of the base, and which, nevertheless, came to a successful issue. The indications to be derived from them are, that those cases which are apparently the most severe may sometimes be saved, and that a guarded prognosis is therefore of the greatest importance.

On the other hand, I shall bring forward several cases of concussion without fracture, and one of fracture of the outer table only, which, though merely manifesting themselves by slight symptoms, and not giving any serious cause for apprehension either at the time of the accident or shortly afterwards, yet terminated unsuccessfully in spite of my best efforts. Caution in diagnosis and carefulness and discrimination in treatment must ever suggest themselves as the lessons to be learnt from these unsuccessful cases, and they may not be without value if they only serve as landmarks in our future practice. One case bearing on the vexed question of the possibility of fracture without depression, and one of gun-shot fracture of the skull, will be found; and lastly, one of fracture of the nasal bone, which proved fatal from the hæmorrhage thereby induced. It ought perhaps to be omitted from the category of injuries of the head, but I am induced by its rarity and interest to give it insertion amongst them.

I shall take the cases in the following order:—

1. Fractures of the vault.
2. Fractures of the base.
3. Cases in which symptoms of concussion or compression existed.
4. Case of depression without fracture.
5. Case of gun-shot fracture.
6. Case of fracture of the nasal bone.

After each separate series I shall make some few remarks on their nature, symptoms, and pathology, and offer such practical deductions as appear to me to arise from their attentive consideration.

CASE 1. *Punctured Fracture of the Skull.*—Geo. S——, aged nine, a strumous-looking boy, was admitted into the Accident ward of the Queen's Hospital about one P.M. on Jan. 11th, 1 60.

*Symptoms on admission.*—Face pale and blanched; extremities cold; lips bloodless; pulse 35, hardly perceptible; clothes and person covered with blood. Upon examination, a wound was found towards the back part of the head, just about the junction of the occipital bone with the superior posterior angles of the parietal bones. A probe passed into the wound for more than an inch, and impinged upon the cerebral substance, which appeared soft and bloody, giving forth a sanguineous fluid, and rising and falling with each respiration. The opening was round, and appeared to have been made with some pointed instrument. The pupils were dilated and insensible to light.

*History.*—His father states that he was playing in the garden with his elder brother, who had a pickaxe in his hand, when an altercation took place. Master George ran away, and his brother pursuing him, struck the pick against the back of his head. He ran a few yards, and then dropped insensible, and continued so until he was brought to the hospital. A torrent of blood followed the receipt of the blow, but it soon ceased to flow in a full stream.

A glass of port wine was given to him on his arrival at the hospital. A graduated compress was applied to the wound, and warm bottles were ordered to the feet. In the evening he became sensible, and reaction set in; his feet became warm; his pulse rose to 84, but was very small. He had vomited freely, and there had been no more hæmorrhage.

Jan. 12th.—Very little febrile disturbance; pulse 118; tongue moist and clean; bowels confined; complains of a little pain on the occiput; is sensible, and answers questions coherently; no bleeding. The heaving up and down of the brain on respiration is still noticed. Continue the compress, and apply cold to the head; low diet; an ounce compound senna draught to be taken immediately.

13th.—Still complains of headache; pulse 120; skin cool and moist; heaving of the cerebral matter has ceased; wound discharges a thin pus; bowels have been moved. Water dressing and compress.

14th.—About the same; pulse 120. Pus has a very foul odour, and is thin and sanguineous.

15th.—No change; pulse 100; headache gone.

17th.—Is slightly feverish; pulse 120; bowels open. Discharge very offensive and copious; considerable heat of skin, and headache. Ordered the following powder:—Calomel, one grain; powdered lactuca, two grains: to be taken every four hours.

18th.—Better; pulse 110; bowels freely open. Wound is beginning to granulate. A probe discovers exposed and depressed bone. Omit powder.

21st.—Reports himself much better. No bad symptoms. Pulse 84; bowels open. Asks for more food. To have a chop.

27th.—Wound discharges less, and odour is not so offensive. Bare bone is still felt, but it is firmly impacted in the brain-substance. Pulse about 80; appetite good; tongue clean; bowels regular.

Feb. 13th.—He left the hospital at his father's request. Soft

granulations filled the wound; the bone could be felt, but was too firm to be removed. His health was very good, and his mental powers unimpaired.

During the following two months the wound continued to discharge, and six ragged and necrosed pieces of bone were removed during that time. Some were of the size of a pea, others were as large as a sixpence. They gradually found their way to the surface, and when they were quite loose I removed them with a pair of dressing forceps. At no time was there any hæmorrhage of importance. Some care was necessary to repress the granulations; but by the occasional application of nitrate of silver and by the constant use of the compress this was effected. Towards the end of May the wound had quite healed, and he was able to go into the country. An opening about the size of a shilling could be felt in the skull; but it was covered in by a good, firm, fibrous cicatrix, through which, however, the pulsations of the brain could be clearly distinguished, particularly when he made any active exertion. His intellect has not been at all affected by the accident, and he is now (Nov. 1861) able to go to school, where he holds a fair position amongst boys of his own age. He never complains of headache or giddiness. The cicatrix is quite firm and solid.

CASE 2. *Compound Fracture of the Skull with Depression, resembling in many respects a punctured fracture.* — James J——, aged twenty-seven, a button-maker, of dissolute habits, was admitted into the Accident ward of the Queen's Hospital at two P.M. on the 10th April, 1861. He stated that, in a quarrel that afternoon at a public-house, he had received a blow from a pair of tongs on the right temple, which knocked him down, and rendered him insensible for about two minutes. He then got up, feeling giddy and confused, and was at once led to the hospital.

Upon examination, there was found a contused wound an inch above and to the right of the right eye; the finger, passed into the wound, entered an aperture in the skull to the extent of three-quarters of an inch, and came upon depressed bone, which was firmly embedded in the cerebral substance. His clothes were saturated with blood, but he was quite sensible. There was no difference of vision in the eyes, and no paralysis of any part.

He was put to bed, and had water-dressing applied; was ordered to have his hair cut, and to have low diet and a purgative draught.

He went on well for several days, and the wound appeared to heal by the first intention, while there was a perfect absence of all constitutional disturbance; but on the 15th April his skin became hot and dry, his tongue thickly coated and tremulous, his pulse 120, soft and compressible; the wound opened, and from it issued a copious discharge of thick pus of a filthy smell. He complained of most severe headache, but there was no squinting, distortion of the features, or paralysis. Ordered solution of acetate of ammonia, half an ounce, in a wineglassful of water every three hours; extra diet and a pint of ale; and to have a bread poultice to the wound.

He went on improving till the 20th, when he is reported as being free from pain, headache, and all febrile symptoms. No bone had come away, and the discharge was still most offensive. To apply a lotion of solution of chlorinate of soda (a drachm to two ounces of water).

April 26th.—General health satisfactory; no pain; wound discharges profusely, and presents no appearance of granulation. To have it injected with a solution of the sulphate of zinc, one grain to an ounce of water; and to take four ounces of port wine daily, with a pint of milk and a pint of beef-tea.

May 2nd.—Health has improved; wound is beginning to granulate; no bone has come away; no paralysis; eats, drinks, and sleeps well.

21st.—No bone has yet come away, though a piece, the size of a half-crown, denuded of periosteum, is seen through the ulcerated opening, which still remains; a probe can be got behind this piece of bone, and it can be slightly moved, but it is still too firmly fixed for ablation; no bad symptoms; health good.

June 4th.—Removed, with very slight effort, an oval-shaped piece of the external table of the frontal bone, an inch long by three quarters of an inch wide; and also a small spiculum of the inner table of the skull. There is evidently more to come away, both from the external and internal tables. No head symptoms. Great care and regularity of living enjoined, and water dressing applied.

18th.—Four small pieces, the largest as big as a finger-nail, have come away; and some more loose bone is felt through the wound, which still discharges. The probe passes more than an inch downwards into the wound. No bad symptoms.

July 4th.—Several small pieces, some of them evidently from the tabula vitrea, have come away.

9th.—At his own request he was allowed to leave the hospital.

During the succeeding month a few more pieces of bone came away, and at the end of that time the opening was filled up with a thin bluish cicatrix, which was depressed at least half an inch below the level of the rest of the forehead. He complains of occasional headaches, but I fear his habits are unsteady.

*(To be concluded.)*

## REPORT OF FIVE CASES OF PARALYSIS.

BY JOHN PEARSON NASH, M.D.,
OF HER MAJESTY'S MADRAS ARMY.

THE attention of the profession having been much directed of late by Dr. Brown-Séquard, Dr. C. B. Radcliffe, Mr. Hilton, and several other distinguished physicians and surgeons of the present day, to the interesting subject of neurology, and as the first-mentioned physician requested his *confrères*, in a letter which appeared some time ago in THE LANCET, to detail the particulars of such cases of paralysis which may have recently come under their observation and treatment, I have much pleasure in forwarding the following cases of five patients who were admitted into the hospital under my charge, and within a few weeks of each other.

CASE 1.—Private L——, of the Madras Sappers and Miners, was admitted into hospital on Oct. 20th, 1860, suffering from paralysis of the lower extremities; retention of urine; pain in the spine extending from the seventh dorsal vertebra to the sacrum, increased by pressure, or on bending the spine in any direction; complains of severe pain shooting down from both hips to the toes, and which is increased by my moving his legs; no numbness, but marked hyperæsthesia, chiefly from the toes to the knees; reflex movements readily excited; suffers from a cord-like constriction just above the navel. The patient states that he has been ill for six days; he first had pains in the loins, then paralysis of the lower extremities, which was followed by the painful sensation of constriction around the abdomen, and only since yesterday had he suffered from retention of urine. The case was easily diagnosed as one of spinal meningitis, and treated with saline aperients and leeches to the most tender part of the spine; subsequently with small doses of ergot and belladonna, accompanied with a diuretic mixture containing iodide of potassium, colchicum, &c., and latterly with blisters. The spasm of the sphincter vesicæ yielded on the second, and the cord like constriction around the abdomen on the fifth day, after the administration of the ergot with belladonna. Belladonna plasters over the lumbar vertebræ, and liniments containing belladonna, greatly assisted in relieving the severe pain in the legs. On the 9th of November, or within three weeks of admission, he was able to walk with a crutch, but with difficulty, in consequence of the contracted state of the muscles of the calf. On the 12th the pain in the spine had nearly disappeared, when blisters were tried. On the 21st he complained of formication in both legs, when small doses of calomel were added to the ergot and belladonna, under the influence of which it yielded, first disappearing in one leg, then in the other. On the 28th the formication had entirely ceased, when the calomel was omitted, and another blister applied over the lumbar vertebræ. On the 30th he was able to walk with the assistance of a stick, and was taking ergot, but without belladonna, in doses of twelve grains, three times a day; also, a mixture containing iodide of potassium. On the 3rd of December he walked without a stick, and was discharged from the hospital on the 5th, and ordered to rejoin his company at Hyderabad.

CASE 2.—Private D——, Madras Sappers and Miners, was admitted September 1st, complaining of inability to walk properly, and of numbness of both legs extending from the toes to the knees, and which are much emaciated, but not reduced in temperature. No reflex movements obtainable. Says he often falls down through weakness in knee and ankle joints. When walking, he extends one foot only six inches before the other. No pain can be detected in any part of the spine, either from pressure or by bending the back in any direction. Countenance extremely melancholic; appetite impaired; complains of general languor; anæsthesia extends from toes to knees;

capable of feeling the prick of a pen about an inch above the knee; experiences occasionally an unpleasant sensation in the calves. Had dysentery three months ago, from which he quickly recovered. Has experienced numbness in the legs for several months, accompanied with general debility. Bowels still have a tendency to be relaxed, but dejections are natural, and free from any dysenteric symptoms.

As the numbness and general debility had existed *before* the attack of dysentery, I resolved to treat the case, not as one of reflex paraplegia, but as chronic softening of the spinal cord. The restorative measures consisted of minute doses of strychnine with opium, iodide of potassium, good diet, frictions, and mustard plasters to the legs; and with some apparent benefit, for the patient was able on the 20th to feel being pinched in any part of the leg, and his gait was also considered slightly improved. On the 1st of October, however, a change for the worse took place. The patient began to complain of heaviness of the whole body; anasarca was now perceptible; the pulse gradually got weaker; respiration became more embarrassed, and anæsthesia more marked. No pain in the spine could be detected, and the urine and fæces were passed naturally; but the patient appeared to have lost heart and all energy, and continually adopted the recumbent position. The doses of strychnine were now discontinued, and diuretics containing iodide of potassium prescribed, but with very little apparent benefit, for the patient gradually got weaker, and while conversing with another patient in the next bed, he suddenly expired, probably from hæmorrhage into the spinal cord—the frequent result of chronic softening. Dr. Brown-Séquard states, if I mistake not, that he does not know of a single recovery from a confirmed case of chronic softening of the spinal cord, and this observation I believe many physicians in India (a country remarkable for diseases of the spinal cord) could easily corroborate.

CASE 3.—Private M. C——, 12th Madras Infantry, when proceeding with a party escorting ordnance and ammunition from Masulipatam to Hyderabad, was attacked with intermittent fever, the paroxysms coming on every morning and continuing until sunset. On the 5th August he lost the use of his upper and lower extremities, and on the next day was admitted into hospital with the following symptoms: Skin hot and dry; countenance anxious; respiration much embarrassed; upper and lower extremities perfectly paralysed; complains of numbness in the extremities, although reflex movements are readily excited; pulse 90, full; heart's action laboured; he passes his urine and fæces naturally; there is no pain in the spine, not even from pressure on the spinous process of either cervical, dorsal, or lumbar vertebræ. For these symptoms he was ordered a powerful purgative, which was followed by saline aperients.

By the 7th, the mixture had produced a very relaxed state of the bowels; the pulse also was lowered, and the heart's action subdued. He states that he feels better during the intermissions, and was able to sleep for some hours during the night. The mixture was ordered to be continued, but at longer intervals.

On the 8th, the paroxysms had set in previous to the hour of my visit (seven A.M.), and the patient, finding his breathing every day getting more embarrassed, implored me to do something to relieve the fever. Having made up my mind that the fever was the *cause* of the spinal congestion, and that it was not of the remittent type which usually accompanies myelitis, and having carefully examined the spine and discovered that no pain existed there, I adopted the plan (which often prevails in India) of administering quinine with depletives, of which three-grain doses were given with the saline aperient.

10th.—The patient distinctly states that the paroxysm was not so severe, and the respiration consequently was less embarrassed. He complains much of the relaxed state of his bowels, in consequence of which the saline aperients were omitted, the quinine continued, and small doses of calomel with Dover's powder ordered at bed-time.

On the 11th, the paroxysm lasted only eight hours, when it terminated in a profuse perspiration. From this the patient appeared to derive considerable benefit, and his skin became cool and moist.

12th.—No return of fever; he feels better, and is able to flex his fingers and toes.

13th.—Had a slight attack of fever, which lasted six hours. The quinine was now increased to doses of five grains.

14th.—Free from fever. When placed on his side he was able to flex the leg, the foot being suddenly jerked to the buttocks, where it remained until removed by an assistant, for he has no power whatever over the extensor muscles.

15th.—The patient is still free from fever, but to-day complains of a "catching sensation" in the calves, and of increased numbness both in the upper and lower extremities. I was now able for the first time to detect pain, or rather uneasiness, when making pressure on the dorsal and lumbar vertebræ, over which were applied twenty-four leeches. A purgative was ordered, and the quinine continued.

On the 16th another purgative was ordered, as the bowels had not been relieved. About noon, I received a note from the dresser, stating that the paroxysm had set in with unusual severity; that the patient had become unconscious, and his respiration much embarrassed. For these symptoms a blister was applied to the neck and mustard plasters to the calves, a powerful enema administered to assist the purgative taken in the morning, and to the quinine mixture was again added the sulphate of magnesia, &c. Consciousness returned soon after the blister had risen, and on the following morning he was able to flex but not extend the arms.

On the 18th he had a slight return of fever, when the quinine was increased to doses of eight grains.

On the 20th he was able to move the arms in any direction, complaining only of weakness at the wrists.

The quinine was continued in diminishing doses until the 25th, when, as the case was no longer complicated with intermittent fever, it was discontinued.

As there was no tenderness along the spine, the once highly-praised strychnine, combined with opium, was tried, to relieve the paraplegic symptoms; but this treatment proved to be highly injudicious, for within three weeks the spine had become extremely tender and the paralysis more marked; hyperæsthesia extended from the toes to the knees, pain and cramps in the calves were frequent, and puffiness of the face and general anasarca rapidly followed, accompanied with a sensation of oppression about the chest.

Sept. 15th.—The patient was now treated with small doses of ergot, belladonna, and calomel; and leeches were applied to the spine, followed by belladonna plasters.

On the 24th (or within nine days) the patient was much relieved, and was capable of walking when supported by an assistant. The calomel was now omitted, and the ergot gradually increased every second day.

On the 4th October he was taking doses of ten grains of ergot, and was able to walk with crutches.

On the 20th, the doses had been increased to eighteen grains.

On the 25th, a blister was applied over the dorso-lumbar enlargement.

On the 1st November he was able to walk with merely a stick; and to expedite matters, galvanism was ordered every other morning. As he was able to walk without any assistance on the 14th, he was discharged as a convalescent; and rejoined the head-quarters of his corps at the end of the same month, fit for duty.

CASE 4.—N. V——, a clerk in the Telegraph Department, was admitted on the 10th of November with difficulty of breathing, inability to walk or stand erect, but able to move his legs while lying in bed; pain experienced from pressure on the upper dorsal vertebræ; no numbness in any part of the body—only a sensation of *heaviness;* has cramp-like sensations in both the calves; anasarca disposed to be general, but most marked in the lower extremities; passes his urine voluntarily; no cerebral derangement; complains of an oppressed sensation about the chest; pulse 80, very feeble; skin cool; bowels very constipated. He has tried native remedies for a fortnight, but without benefit. The above symptoms, not unlike those of beriberi, and frequently occurring in an epidemic form, appear to indicate subacute inflammation of the upper part of the spinal cord with effusion, and generally require prompt treatment, but without diminishing the strength of the patient too much. Saline aperients, leeches over the tender parts of the spine, ergot, belladonna, and calomel, with blisters, constitute the treatment from which I have witnessed most benefit, but certainly not in those cases that seek medical relief a fortnight after the attack.

The clerk, whose case is detailed above, died the day after his admission into hospital; and the reason why so many persons die from similar diseases in this country is in consequence of their timidity or dislike to enter a Government hospital, through caste prejudices, at the commencement of their disorders.

CASE 5.—Pensioner J. R——, admitted on the 2nd of Sept., groaning, sobbing, and crying; also unable to speak, swallow, walk, stand erect, or comprehend any observation addressed to him. On endeavouring to administer a purgative powder, and afterwards a draught, it was discovered that the patient

had entirely lost the power of deglutition. Several attempts were also made by his friends and relatives to induce him to swallow some sort of nourishment, but in vain; for as soon as the fluid reached the back part of his throat it threatened suffocation and was rejected, although the patient appeared anxious to swallow. The treatment consisted of a blister to the neck, a powerful enema, and mustard plasters to the legs, which, like the whole of his body, were remarkably cold. Soon after the blister had risen he was able to comprehend the questions put to him, but was unable to give distinct replies. At bed-time an opiate was given to ensure sleep. On the following morning he was able to speak, though with some little impediment. The day after he had quite regained his speech, and the paralytic symptoms were seen gradually disappearing. Stimulants were now ordered; and in a few days he left the hospital to proceed on his journey.

On learning the previous history of his case, I immediately diagnosed it to be one of "emotional paralysis." It appeared that the man, who was a Mahomedan, had lately lost his wife; that on going to her grave for the purpose of throwing over it milk and rice,—a practice adopted by the followers of Mahomet,—he was overcome with grief, and suddenly seized with the symptoms above described, which, though extremely distressing for relatives to witness, need not excite much anxiety to the physician, as patients generally make a rapid recovery a few days after the emotional excitement.

In THE LANCET of Aug. 14th, 1860, I find a very similar case recorded by Dr. Wiblin, in which allusion is made to three or four other cases which came under the observation of the late much respected Dr. Todd.

Madras, 1861.

# A Mirror

## OF THE PRACTICE OF

# MEDICINE AND SURGERY

## IN THE

# HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

## ST. MARY'S HOSPITAL.

### STONE IN THE BLADDER, THE NUCLEUS OF WHICH CONSISTED OF PIECES OF SPONGE; LITHOTOMY; RECOVERY.

(Under the care of Mr. COULSON.)

LATTERLY examples of calculus have not only been frequent, but several of them have presented features of considerable interest. Thus we have noticed the complication of tumours within the bladder, sacs or pouches, encysting of the stone, adhesion to the mucous membrane, very large size of the calculus, and the presence of pieces of sponge as the nucleus.

With respect to size, Mr. Coulson remarks, in his standard work on Lithotomy, that "it is the size of the stone which concerns the lithotomist; yet, strange to say, nearly all writers give us the weight of the calculus instead of its dimensions, and we are left to guess at the size from the weight, although a large stone may be comparatively light, and *vice versâ*." In three cases of stone which have lately come under our notice, the dimensions of each were really considerable, although the weight was comparatively light, as in Mr. Lee's case, the sequel of which is given this week; and in Mr. Johnson's and Mr. Paget's cases, both of which will appear in a future number. In Mr. Paget's patient, the stone resembled a large potato, weighing upwards of nine ounces.

The nature and variety of the substances which have been found to form the nucleus of calculi are oftentimes very remarkable, but the following case is, we may say, almost unique, since pieces of sponge constituted the nucleus of the stone. Pencils, portions of catheters and other long bodies, such as thin sticks of sealing-wax, readily find their way along the urethra; but the question will be asked—How did a piece of sponge get into the bladder? The explanation is given in the notes of the case, and it clearly points to the necessity for caution in plugging a wound, like that made in the lateral operation, with such a substance, unless great care is afterwards taken in its extraction. The patient was cut for stone, and as there was obstinate hæmorrhage afterwards, the wound was plugged with several pieces of sponge; one of these found its way into the bladder, and became the nucleus of another calculus. When in the bladder, it must have become partially disintegrated, as small portions were passed by the urethra, whilst others became covered with calculous deposit. At the commencement, the single fragment of sponge constituted but one nucleus. Its soft and porous character, however, must have resisted the formation of a calculus in the usual manner, and subsequently it broke up into several portions within the bladder.

W. S——, aged twenty-two years, was admitted into St. Mary's Hospital in July last. Eighteen months ago he had been operated upon for stone by a very able surgeon; but considerable hæmorrhage occurring after the operation, the wound was plugged with sponge by an assistant. The stone was of the mulberry kind, and of the size of a walnut. He was relieved of all his symptoms for a time, but the wound in the perineum never completely healed.

In a few months afterwards symptoms of stone returned, and minute pieces of sponge, covered with phosphate of lime, were passed by the urethra. On his admission, there was great irritability of the bladder, and the urine was tinged with blood, and contained adhesive mucus and fragments of phosphate of lime. There was an opening in the perineum of the size of a pea. On introducing a sound when under the influence of chloroform, a stone could be felt in the urethra just in front of the prostate, and some calculous fragments in the bladder. A few days after his admission, Mr. Coulson performed the lateral operation of lithotomy, and removed from the bladder several pieces of sponge coated with phosphate of lime, and one from the urethra in front of the prostate. The patient recovered quickly from the effects of the operation; but it was considered advisable, in consequence of the long-continued derangement of the mucous membrane of the bladder, to use nitric acid injections in this case (one drop of pure nitric acid to six ounces of water). These were commenced a month after the operation, and continued daily till he left the hospital in September quite well.

In this case it is quite evident that a piece of sponge made its way into the bladder at the time of the previous operation, which set up inflammation of its mucous lining, causing the secretion of mucus containing phosphate of lime, which formed chiefly around it as a nucleus.

It is remarkable what quantities of phosphate of lime may be secreted by the presence of a foreign body. At the time of this operation we heard Mr. Coulson state that on one occasion he removed a stone solely composed of phosphate of lime from a female bladder, into which a hair-pin had been introduced. The patient was under the care of Mr. Shillitoe, of Hitchin, who attended her during her confinement, and finding the vagina obstructed by a considerable mass like a tumour, he was obliged to raise it in order to permit of delivery. As soon after delivery as could be, he introduced a sound into the bladder, and recognised a stone, which Mr. Coulson removed. This was taken away in detached masses, and the nucleus was found to be the hair-pin. This patient had been perfectly healthy until she passed the hair-pin into the bladder, which gave rise to irritation of the mucous membrane, and the deposition of calcareous matter upon it.

## KING'S COLLEGE HOSPITAL.

### STONE IN THE BLADDER, COMPLICATED WITH A FUNGOID TUMOUR; LITHOTOMY; FATAL RESULT; AUTOPSY.

(Under the care of Mr. FERGUSON.)

A RARE complication of stone is the presence of some one or more tumours growing from within the bladder. The same standard authority just referred to (Mr. Coulson), attributes their origin sometimes to the irritation produced by the stone itself. They are generally fungoid in character, or resemble polypi, presenting a firm or exceedingly hard and cartilaginous substance. Their dimensions vary as well as their situation, and not unfrequently a stone appears to grow into them, or they become covered with calculous or phosphatic deposit. As

can be readily comprehended, they not only modify the symptoms of calculus, according to their situation, but very much complicate the operation adopted to get rid of the accompanying stone. The presence of these tumours is often quite unexpected, and their discovery is only made when attempting to extract the calculus by lithotomy. Such an occurrence took place in the following case. The tumour occupied a position in the bladder which prevented the ready seizure of the calculus, until it was itself first removed. Its true character was suspected by Mr. Fergusson, and the prognosis became very serious, which the subsequent results fully confirmed. Mr. Fergusson believed that the tumour was the consequence of the irritation produced by the mulberry calculus, the nodules on the surface of which were small and somewhat acuminated.

For the notes of the case we are indebted to Mr. G. Fortescue, late house surgeon to the hospital:—

G. B——, aged thirty-six, a porter, living at Dover, a hard-working, stout, healthy-looking man, but of rather free habits. About two years ago he experienced pain in the loins, stretching downwards to the groin, continuing a few days, and possibly attributable to the passage of a renal calculus. From this time he remained in perfect health until six months ago, when he noticed one day a large quantity of blood pass with his urine, and since that he has always had more or less pain in micturition, and most of the varied symptoms—latterly very urgent indeed—which mark the presence of a urinary calculus. He was sounded by Mr. Fergusson some six weeks back, and a stone was felt. His symptoms had gradually increased in severity, and were beginning at length to tell upon his health. He was recommended to come into the hospital, and was admitted on Oct. 2nd, 1861.

Oct. 5th.—Mr. Fergusson performed the lateral operation of lithotomy. On introducing the forceps and withdrawing them, he brought away a quantity of soft fungoid growth of encephaloid character, with a similar result on the second attempt; on the third occasion, however, he seized and withdrew a mulberry calculus, about the size of a pigeon's egg. Directly after the operation the patient experienced very severe pain, which was relieved with difficulty by opiates.

7th.—Part of his urine comes through the urethra, and causes an excessive sensation of scalding pain. He suffers somewhat from the accumulation of wind in the bowels, and complains of pain over the region of the bladder, which is relieved by the passage of the flatus. Fomentations ordered.

10th.—The edges of the wound look sloughy and unhealthy; poultice applied. He is weak, anxious, and without appetite. All the urine passes through the incision.

23rd.—No material change since last date, but there is some uneasiness over the bladder. Several sloughs have been removed from the wound. The urine is highly alkaline, and deposits a thick sediment; and a constant discharge of pus comes from the urethra.

26th.—The wound still looks sloughy; he suffers agonizing fits of scalding pain when passing urine, a portion of which comes by the urethra; the bladder has been washed out with tepid water several times lately, and many shreds of the fungoid growth have come away through the wound. The patient is very weak, and has a brown, dry tongue; pulse 100.

28th.—Complains of great pain over the bladder.

Nov. 4th.—No alteration; still complains of much pain in the region of the bladder; the urine passes almost entirely through the wound.

7th.—The urine, examined microscopically, was found to contain pus in abundance, a few disintegrated blood corpuscles, dumb-bell crystals of oxalate of lime, crystals of triple phosphate, but no abnormal cells. Nearly half the urine comes by the urethra.

Dec. 11th.—He continued to sink gradually without material alteration of the symptoms, suffering from pain in the region of the bladder, and most intense agony, referred generally to the extremity of the penis, experienced when passing his urine, about half of which flowed by the urethra. To deaden this sensation a variety of opiates were tried, with little or no effect. He complained latterly of great pain when passing his evacuations. He became slowly exhausted, and died this evening at about ten o'clock.

*Autopsy, fifteen hours after death.*—A good deal of fat still remained about the surfaces of the abdomen. The mesentery, omentum, and intestines were healthy. The stomach and large intestines were much distended with flatus, and the rectum was loaded with faeces. The liver was rather large, but apparently healthy in structure. The right kidney was large, and marked with white patches. On making a section, a quantity of dark grumous fluid escaped. The pelvis was in a state of disorganization. The left kidney was small. Purulent fluid escaped from the cut ureter. The ureter was enlarged, and the pelvis was occupied by four or five cysts filled with pus. The bladder and pelvic viscera were removed *en masse*, with the transverse and ascending rami of the pubes. The wound seemed to have contracted more than was apparent during life. On opening the bladder, its walls were seen to be lined with a light coloured, softened, warty growth, spongy, easily broken down, and filling up a considerable portion of the cavity.

## ROYAL FREE HOSPITAL.

### LARGE MULBERRY CALCULUS, ATTACHED TO THE BLADDER, AND PARTIALLY ENCYSTED; LITHOTOMY; RECOVERY.

(Under the care of Mr. GANT.)

THE chief point of interest in the following case was the circumstance that the calculus was partially encysted, and at the same time to some extent adherent to the mucous membrane of the bladder. Some writers doubt the possibility of literal adhesion of a stone to the walls of the viscus, but there are now too many well authenticated cases on record to permit us any longer to discredit the fact. In Mr. Lee's case the calculous deposit was firmly adherent to the lining membrane of the bladder.

For the particulars of this case we are indebted to Mr. J. D. Hill, house-surgeon to the hospital.

W. M——, aged sixty-four, was admitted on the 15th of November last, having been sent from Hastings, with some of the symptoms of stone, of six years' duration. From time to time during the whole of this period he had suffered pain and occasional difficulty of micturition, increased when the bladder was fuller than usual, so that it then amounted almost to retention. Occasionally a little blood was passed after micturition, and sometimes a bearing-down pain was experienced after going to stool. On introducing a No. 9 sound, a calculus was now and then struck, in one situation only—viz., behind the prostate and towards the posterior aspect of the bladder, a little to the right side. When the bladder contained but little urine, the calculus could scarcely be detected; when the bladder was more distended, a clear "ring" was distinctly audible on striking the stone. On these occasions, however, it was necessary to depress the handle of the sound considerably in order to strike the stone; but when the bladder was comparatively empty, the sound came into contact with the calculus more immediately, although less palpably. The stone never changed its situation, and the man was tolerably free from pain after walking about briskly, provided there was a small quantity of urine in the bladder.

Duly considering all these facts, Mr. Gant came to the conclusion that the calculus, obviously present, was attached to the bladder in the situation named, and also partially encysted. This diagnosis was subsequently fully confirmed by the operation. A continued attack of diarrhœa reduced the patient's strength, and delayed the operation until he had sufficiently regained his usual state of health.

On the 9th December, chloroform having been administered, Mr. Gant performed the usual lateral operation. There was nothing worthy of note, excepting the difficulty of extracting the stone; however, with careful manipulation, it was detached, seized, and removed.

No symptom of peritonitis supervened, and the case progressed most satisfactorily, with the exception of a slight attack of secondary hæmorrhage at the end of a week, which somewhat impeded the healing of the wound. The urine passed partly by the urethra in a fortnight, and entirely so about the twenty-fourth day. Towards the end of the case the urine deposited mucus, but this soon disappeared, and it became quite clear and healthy. The wound had completely healed by the 20th January, or within the sixth week after the operation; and the patient, having been allowed a short time to recruit his strength, was discharged cured on the 27th.

## ST. GEORGE'S HOSPITAL.

### SEQUEL TO A CASE OF CALCULUS, FILLING THE BLADDER; FATAL RESULT; PRESENCE OF SEVERAL CYSTS CONTAINING CALCULOUS DEPOSIT.

(Under the care of Mr. HENRY LEE.)

THE subject of this case went on pretty well the first two days after the operation. On the third he became very low,

and died in the afternoon. The autopsy revealed the presence of several large cysts or sacs, one of them being nearly as large as the bladder itself. The latter presented evidences of inflammatory disease, which mainly hastened the fatal result. In some of the cysts numerous calculous fragments were lodged, and had the patient lived, they would have become the nidus for a return of the complaint. Mr. Coulson, in his work, refers to the record of a case in which the operator took six months to free the bladder completely from the detritus.

The following case was noticed in our "Mirror" of the 4th January:—

The patient, George W——, aged forty-three, was admitted on December 10th, 1861, with a stone in the bladder, for which lithotomy was performed by Mr. Henry Lee. He stated that there had been something wrong with his urine for twenty years, but the symptoms were never urgent. Six months ago he passed some small pieces of stone. For the last two months he has been unable to hold his urine; it continually dribbled away. He suffered also from prolapsus ani. A stone was readily detected, and lithotomy was performed on the 19th of December by the median method, with a modification of the bilateral, as has been already described. A large stone was found filling up the whole of the bladder, so that the finger could hardly be passed between it and the walls of the latter—so large, in fact, that the blades of the forceps could not be dilated sufficiently to grasp it. The stone was soft and friable; it was therefore broken up by the forceps, and the fragments extracted. The nucleus was hard and large. Some fragments of stone were adherent to the mucous membrane of the bladder, and imbedded in it, so that they could not be removed. At four P.M. of the same day he had quite recovered from the effects of the chloroform. He felt sick, and there was constant oozing of blood from the wound; pulse 144.—At eight P.M., he felt comfortable, and inclined to sleep; no bleeding.

Dec. 20th.—Seems pretty cheerful. Has had no more sickness, and the bleeding has entirely ceased. He did not sleep well; pulse 110; tongue furred.

21st.—Passed a pretty comfortable night, and does not complain of any pain; pulse 140, intermittent; very little urine comes through the wound. He takes twenty drops of laudanum every three hours, and six ounces of gin daily.

22nd.—He was decidedly lower; pulse very intermittent, and feebler; evidently sinking. Gin omitted; to have eight ounces of red wine. He gradually got weaker, and died quietly at half-past three P.M.

*Autopsy, twenty-three hours after death.*—Body in good condition. The heart was healthy, except two or three nodules of atheromatous matter upon the aortic valves. The lungs and bronchial tubes were filled with frothy mucus. The cells of the liver were fatty. There was no peritonitis. The lining membrane and coats of the bladder were much congested, soft, and pulpy; the lining was very rugged, and was spotted in many places with fragments of calculus. The walls were thickened, and the cavity small. There were several pouches of considerable size: one at the neck, about half the size of the bladder itself. There were two others which would have held chestnuts. Through one of these the opening into the bladder was constricted.

## METROPOLITAN FREE HOSPITAL.

### THIRTY-THIRD CONSECUTIVE CASE OF LITHOTOMY AND RECOVERY.

(Under the care of Mr. G. BOBLASE CHILDS.)

FOR the notes of the following case we are indebted to Dr. John Warner, the resident medical officer:—

Henry P——, aged three years, a full-faced rickety child, with prominent forehead, surcloset anterior fontanelle, and enlarged ends of long bones, and who cannot walk alone, was admitted on the 5th November, suffering from stone in the bladder. Symptoms of the disease had been noticed for about four months. No blood had been observed in his urine, but micturition had been very frequent and painful; of late he had had incontinence. The use of the sound immediately detected a small calculus. Mr. Childs performed the usual lateral operation on November 9th, and extracted a smooth lithate-of-ammonia calculus, of about the size of a horse bean. By the end of a fortnight the wound had quite healed, and the patient was discharged cured on December 3rd.

This is the thirty-third consecutive case of lithotomy performed by Mr. Childs, in private and hospital practice, followed by complete recovery, and without the occurrence of any serious symptoms. The only peculiarities in Mr. Childs' mode of operating are,—that he does not inject the bladder, but directs the patient to retain his urine for some time before the operation; and that he incises the bladder to a very small extent, just sufficient to admit of the forefinger being used as a dilator.

# Medical Societies.

## ROYAL MEDICAL & CHIRURGICAL SOCIETY.

TUESDAY, JAN. 28TH, 1862.

DR. BABINGTON, PRESIDENT, IN THE CHAIR.

### ON THE TEMPERATURE, UREA, CHLORIDE OF SODIUM, AND URINARY WATER IN SCARLET FEVER; AND ON A CYCLE IN DISEASE AND HEALTH.

BY SYDNEY RINGER, M.B.,

RESIDENT MEDICAL OFFICER TO UNIVERSITY COLLEGE HOSPITAL, LATE MEDICAL REGISTRAR TO THE CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.

(*Communicated by* Dr. GARROD, F.R.S.)

THE observations were made on patients in the Hospital for Sick Children, under the care of Drs. West, Jenner, and Hillier. Thirty cases are given. The temperature, taken several times during the day, is given in charts. The urea and chloride of sodium were estimated daily by Liebig's volumetric method. The observations extended over a variable time, in some cases till the forty-fifth day of the disease.

I. *On the Temperature.*

1. This fell, in the great majority of cases, on either the fifth, tenth, or fifteenth day of the disease.

2. When the temperature remained high till the fifteenth or the twentieth day, a fall of variable intensity occurred, usually on each of the preceding fifth days—namely, the fifth, tenth, and fifteenth. The temperature after each fall in some cases remained, during the subsequent five days, at the same point reached on the preceding fifth day; in other cases it rose again, reaching during the second or third five days a point as high as it did during the first five.

3. Each fall of the temperature is accompanied by an improvement in the state of the patient, which remains permanent when the temperature does not again rise.

4. Of seventeen cases that came early under notice, the average maximum temperature was a little above 103°.

5. Subsequent to the great fall experienced on the fifth, tenth, or fifteenth day, the temperature often remained rather too high over a variable time, in some cases for fifteen days. The degree of elevation varied, in some cases being between 100° and 101°, but more frequently between 99° and 100°. This elevation of the temperature also usually experienced a fall on each fifth day.

6. This subsequent elevation of the temperature, if of any persistence, was coincident with a continuation of the lesions produced by the scarlet fever, as sore-throat, &c. It sometimes preceded an attack of Bright's disease.

7. At a variable period after the scarlet fever, another elevation of the temperature occurred, due either to Bright's disease, endocarditis, tuberculosis, or chicken-pox; in two cases the cause could not be ascertained.

8. The date of the second elevation varied: thus, counting from the commencement of the scarlet fever, in albuminuria the mean of six cases gave the twenty-second day; in two cases in which the elevation was probably due to endocarditis, the elevation began on the eighth day; in one case of chicken-pox it commenced on the sixth day; in one case of tuberculosis, on the ninth.

9. The duration of the elevation due to the above causes varied from two to thirteen days.

10. This subsequent elevation of the temperature due to intercurrent disease always fell either on a fifth day from its own commencement or on a fifth day from the commencement of the scarlet fever.

11. Thus the temperature forms arcs or cycles, lasting in the majority of cases five days; this equally applies to the temperature of the scarlet fever, or of any subsequent intercurrent disease.

12. In severe cases the temperature remained at the same point throughout the day; in slighter cases it fell in the morn-

ing and rose during the day: this fall in the morning is one of the earliest signs of improvement.

13. The hour of the day at which the temperature reached its highest point varied greatly. It was most frequently at its highest at some time between two P.M. and eight P.M.

II. *On the Urea.*

1. The urea appears to suffer no increase during the fever.
2. The amount of urea for many days after the decline of the fever is far below the amount normal to the patient.
3. From the above, the author thinks it probable that the kidney is affected from the commencement of the attack, and the elimination of the urea thus checked. In some of the cases the children were puffy about the face, without any blood or albumen occurring in the urine; this perhaps was caused by the retention of urea.
4. On the intercurrence of Bright's disease, the urea in some cases was greatly diminished; in other cases no diminution occurred.

III. *On the Chlorides.*

1. The chlorides were never found absent in any of the cases analyzed.
2. Their amount was always much diminished during the fever days.
3. After the fall of the temperature the chlorides increased gradually.
4. In one case in which Bright's disease supervened the chlorides were estimated: they suffered very little diminution.

IV. *On the Urinary Water.*

Often during the fever there is no diminution in the amount of urinary water; in some cases it is increased.

V. *On the Albumen in the Urine.*

1. The albumen appears at two different periods: (*a*) during the fever days; (*b*) later, during the non-fever days. Out of 21 cases, it only appeared once during the fever days. Of 18 cases which were in the hospital for a considerable time, in 7 albumen appeared during the fever free days.
2. The time of its appearance varied from the ninth to the twenty-third day.
3. The duration of the albumen in the urine varied from three to forty-nine days.
4. There is no necessary connexion between the intensity of the inflammation (tested by the elevation of the temperature) and the duration of the albumen in the urine.
5. There is no necessary connexion between the intensity of the inflammation and the amount of albumen in the urine.

VI. *On Blood in the Urine.*

1. There may be an elevation of the temperature, due probably to inflammation of the kidney, without any blood in the urine.
2. In no case did blood appear without previous elevation of the temperature.
3. In some cases the blood continued long after the fall of the temperature, and thus probably after the decline of the inflammation.

VII. *Relationship between the Blood and Albumen in the Urine.*

1. A very large amount of albumen may occur in the urine without any blood.
2. Blood to a very large amount may occur in the urine with the slightest trace of albumen; and if the blood-corpuscles be allowed to settle, the supernatant fluid may give no evidence of albumen.

These cases given were seldom dropsical; they, however, often looked puffy in the face. In some cases the second elevation of the temperature due to Bright's disease was not followed even by puffiness. In one case the patient was puffy, without any other indication of Bright's disease.

VIII. *On a Cycle in Disease.*

In the cases given the temperature did not run an equable course, neither remaining at the same temperature throughout; but formed cycles, composed of a variable number of days, each cycle, however, being composed of the same number of days in the same patient. The cycles in the great majority of cases were composed of five days.

IX. *On a Cycle in Health.*

The author tries to prove from the cases given that in health we have a daily and a five-days' cycle of tissue change. He further tries to show that in fevers we have a great increase of this daily and five days' cycle of tissue change, from which results the great elevation of the temperature.

Dr. EDWARD SMITH thought that the paper was valuable as the expression of the opinions of one who had taken great pains in such inquiries. The Society would, however, have been able to follow the author's meaning more easily if he had used English terms for weights and measures. Dr. Ringer had made his experiments on temperature by placing the thermometer in the armpit. Now the temperature of the body in different parts varied; and, again, it was influenced by the action of the skin: so that great care was requisite in order to avoid fallacy. He wished also to know if the observations had been made at the same period of the day, and at the same distance of time from meals. Again, the relation of urea to the body-weight differed in different persons. In his own case it was one grain to the pound, but in others it varied to a great extent. It did not depend so much on the bulk or the weight, as on the relative quantity of nitrogen in the body. The food, too, and its nature as to richness in nitrogen, was a point on which great care ought to be exercised, as it would have much influence on the amount of urea excreted.

Dr. RINGER briefly replied.

## OBSTETRICAL SOCIETY OF LONDON.

FEBRUARY 5TH, 1862.

DR. TYLER SMITH, PRESIDENT, IN THE CHAIR.

THE following gentlemen were duly elected Fellows of the Society:—Thos. Thornely Brooke, St. Mary's Hospital; John Clarke, Lynton, North Devon; John Stewart Lamb, M.D. Ed., Maida hill; Malim Sharman, Birmingham; Geo. John Vine, F.R.C.S., Woburn-place.

Dr. HARLEY read his report on Mr. Spencer Wells's case of

EXFOLIATION OF THE FEMALE BLADDER.

The specimen is a bag or sac, as large as a child's head, and perfect on all sides except one, where there are several rents. The exterior is of a white colour, and distinctly muscular, the muscular fibres running in an interlacing manner, as in the urinary bladder. The interior is of a dark colour, and everywhere covered with gritty deposit, on the removal of which a smooth mucous membrane comes into view. The gritty deposit consists of crystalline phosphates and urates. Over a limited portion of the external surface is a patch of a smooth membrane, like a serous membrane; and if it be such, it is probably a portion of the peritoneum. No ureters nor orifices of ureters are to be found in the specimen, and the position of the urethra cannot be ascertained in consequence of the rents in the lower portion of the specimen. For a similar reason, it is impossible to discover whether the specimen is an entire organ or only a portion of an organ. The question, "Is it a human bladder?" is not easily answered on anatomical grounds, for in its present state the specimen has neither the size nor shape of a human female bladder. The moral evidence, however, is all in favour of the view that it is, as has been described, an exfoliation of a human bladder.

The foregoing are the general conclusions arrived at by the reporter; the arguments for and against the view taken were minutely and elaborately stated by Dr. Harley.

Dr. TANNER remarked that there was a preparation (No. 1993) in the museum of the Royal College of Surgeons which might help to throw some light upon the nature of the specimen that had just been reported on. The history of the patient from whose bladder the membrane was removed had been communicated to him (Dr. Tanner) by Dr. Knox, and was as follows:—A man, seventy years of age, living in Edinburgh, fell from a scaffold, and in consequence suffered from retention of urine. The catheter was introduced frequently, and a thick puriform fluid drawn off by it. At the end of the third week, however, nothing would pass through the instrument; while the point of the catheter could be felt to impinge upon a membrane. To relieve the man's sufferings, the late Mr. Liston, assisted by Dr. Knox, cut into the bladder from above the pubes, and thus allowed a large quantity of purulent fluid and a membrane to escape. The patient lived for three months afterwards, discharging his urine partly through the wound and partly through the urethra. On examining the layer of membrane, it is seen to be of saccular form, about six inches in its longer and four inches in its shorter diameter. Its shape indicates that it lined the whole interior of the bladder, and was thrown off from it

in one piece. The outer surface is flocculent, and in parts distinctly fibrous; the inner surface is granular and reticulated, like superficially ulcerated mucous membrane. In fact, as the Catalogue states, it exactly resembles the mucous membrane of a bladder, separated as a slough in one piece.

### PROTRACTED RETENTION OF BLIGHTED OVUM.

Dr. UVEDALE WEST exhibited a specimen of blighted ovum, which had come away two days previously, after being retained until the expiration of twelve months from the commencement of pregnancy, the embryo having probably perished as early as the end of the fourth month. Independently of the interest attaching to the specimen as an example of protracted retention of blighted ovum, Dr. West thought the case instructive as being one in which both patient and doctor had been right and wrong at the same time: the former having to the last persisted in the belief that she was not only pregnant, but normally so; the latter having told the patient, when consulted by her after the expiration of her nine months, that she was not only mistaken, but altogether so. The ultimate expulsion of the mass exhibited, however, explained everything.

### DISCOLORATION OF THE SKIN OF THE FOREARMS AND HANDS DURING PREGNANCY.

BY J. G. SWAYNE, M.D., BRISTOL.

This case was a strongly marked instance of discoloration of the skin in various parts of the body. The patient, aged twenty-six, was a blonde, rather florid, brown hair, and blue eyes, in her fourth pregnancy. The discoloration was most marked at the wrist (as shown in drawings exhibited); here the skin was of a rich yellowish-brown. Similar discolorations were noticed at previous pregnancies, beginning at the fourth month, and increasing in intensity from that time. The mother had been similarly affected.

### DIFFICULT LABOUR FROM LOCKED HEADS.

BY HENRY RAYNER, ESQ., GRINGLEY, NEAR BAWTRY.

The case resembled Dr. Pollock's, detailed at the meeting of the Society in April, 1861. The head of the second child took precedence of that of the first, whose body was already in advance; the two chins were in contact, and labour was arrested. The first child, being dead, was decapitated, and the second child then delivered. It was alive, but expired soon afterwards. The head of the first child was next extracted.

Dr. BARNES wished to make one observation on the subject of locked twins. He entertained a confident belief that in some of these cases a method less repulsive than decapitation might be resorted to. The two heads might be unlocked by pushing back somewhat the presenting child, and then by external manipulation the head of the second child might be pushed away from under the chin of the first child, and thus the obstacle to the birth of the first might be removed. He (Dr. Barnes) did not undertake to say that he had actually succeeded in this manner in extricating locked twins; but in a case which had happened to him, after external manipulation employed for this purpose, the two heads had been found freed from each other.

### RETAINED MENSES OF TWO YEARS' DURATION, CAUSED BY ATRESIA VAGINÆ, AND TREATED BY PUNCTURE OF THE UTERUS PER RECTUM.

BY BAKER BROWN, ESQ., F.R.C.S.

M. D——, aged fifteen, single, admitted into the London Surgical Home Nov. 13th, 1861. She had suffered for two years great pain at every monthly period, without any show of menses. Latterly the pain had been constant and excruciating. Mr. Teale, of Leeds, had attempted to make an artificial vagina, but failed for want of sufficient tissue. The uterus externally felt the size of a four months' gravid organ, and it could be felt bulging on the rectum. The girl was otherwise well developed.

Nov. 21st.—Mr. Brown introduced a curved trocar into the uterus per rectum, and fastened the canula in by tapes. At the time of the operation a good deal of treacly-looking matter escaped through the canula, and continued to do so for two or three days after. On the 24th, she had some pain, followed by a discharge of healthy and fresh menstrual fluid through the canula. On the 27th, the bowels were opened, the canula being still in. The canula was kept in for a fortnight, the bowels acting regularly every day. On the 2nd of January, after two or three days' suffering of uterine pain, she again menstruated per rectum, and shortly afterwards returned home quite well.

Dr. ROUTH, after thanking Mr. Brown for his contribution, remarked that the case was satisfactory as one of recovery after liberating a menstrual accumulation per rectum. It was important because usually, when an opening for the same purpose was made per vaginam, death was the result. How far, therefore, did recovery depend upon the rectal opening? It was well known we occasionally met with large ovarian cysts within the pelvis, which gave rise to so much distress and pain that the liberation of the contained fluid became imperative. Now he believed five such cases had occurred in the Samaritan Hospital, all of which, except one, had died after the operation. The continual drain kept up of purulent matter, which usually became very offensive, exhausted the patient in the end, although the immediate effect was relief. Did this depend on the passage of air within the cavity? It was known as a practical point, already insisted upon by Dr. Oldham, for reducing retroverted wombs, that if the vagina was opened and pulled backwards a rush of air took place, and the vagina was pulled out, and so the reduction effected. Did not something like this occur in those cases where the opening was made by the vagina, which was prevented by the sphincter ani from taking place when the opening was made per rectum? *A priori*, we should expect the reverse, from the probable passage of flatus through the opening made per rectum into the cyst or uterus. It was known how intensely putrid were the contents of abscesses near the rectum, from the passage of fecal matters or flatus within them; yet recovery was not uncommon when the opening was made per rectum. Did anything depend on the vaginal opening, when made, remaining unclosed? Altogether he thought it an important surgical point to determine, which he hoped on some future day to take up and embody in a paper for the Society.

Mr. SPENCER WELLS agreed with Dr. Routh as to the necessity for inquiry into the relative safety of tapping by the vagina or by the rectum in cases where ovarian cysts were adherent within the pelvis. He had tapped by the vagina in three patients in the Samaritan Hospital. In the first case the operation was performed more than two years ago; and although the woman could not be said to be entirely cured, as some discharge still went on, yet she was in so good a state of health as to be able to walk two or three miles. In a second case, the woman died a few months after the tapping, exhausted by continuous discharge. In the third instance, the patient gained great temporary relief, but the sac was filling again. In cases where he had tapped by the rectum, he had not seen the same suppurative inflammation of the lining membrane of the cyst as after tapping by the vagina; but he had seen troublesome dysenteric tenesmus from the constant discharge of ovarian fluid into the rectum. He could not believe that it was better to have the fetid gases formed in the intestines entering an ovarian cyst than the pure atmospheric air; and he had seen cases where ovarian cysts had opened spontaneously into the rectum, or into some other part of the intestinal canal, prove rapidly fatal after putrefactive fermentation of the ovarian fluid. It was a very important practical question, which required further observation.

Dr. TYLER SMITH hoped the further history of the case would be noted.

Mr. BROWN replied by stating that this case would still be under the watchful eye of Dr. Wright, of Malton, who was a most careful observer of disease, and deeply interested in this particular case, so that Mr. Brown would be able to report hereafter to the Society the condition of the patient.

## EPIDEMIOLOGICAL SOCIETY.

DR. BABINGTON, PRESIDENT, IN THE CHAIR.

A PAPER by Dr. ARCHIBALD SMITH,

ON THE SPOTTED HÆMORRHAGIC YELLOW FEVER OF THE PERUVIAN ANDES DURING 1853, '54, '55, '56 AND '57,

was read by Dr. M'WILLIAM. The author commenced by stating that it was supposed by some medical men in Peru that these epidemics on the coast and in the mountains were only coincident pestilences, without any essential identity of nature or origin. Whether the epidemic which began on the coast in 1852-53 was of foreign or domestic growth, is a question that has not as yet been satisfactorily answered. Once the disease became general, it was often impossible to ascertain the mode of its propagation; although it was certainly observed that when one member of a family was attacked, it generally spread throughout the whole household.

Since the epidemic of yellow fever in Guayaquil in 1842-45, there have been frequent instances of persons who had recently had yellow fever arriving in Callao and Lima. But the fact is a remarkable one, that it has been only since the discovery of gold in California, and the consequent rush of shipping and people from the Atlantic to the Pacific shores, that these recent epidemics have sprung up in Peru.

*The Sierra Epidemic of* 1853, '54, '55, '56, *and* '57.—It is supposed that the epidemic which for several years committed great ravages in the Andes of Peru proved fatal to full one-fourth of the Indian race inhabiting the upper country. Dr. Smith described the course of the disease as it appeared in the Northern, Southern, and Central Sierra departments.

In the north, the epidemic commenced in a mild transandine climate, and in a village of agricultural labourers, called Yurma, with a population of about 1000 inhabitants. This is usually distinguished as the Epidemy of Conchucos in the department of Ancachs. The same disease appeared in the inland district of Chincheros, in the Central department of Ayacucho, about the latter end of April or early in May, 1855. It was ascribed to the return of soldiers of the battalion Aymaraes, who, with a convoy of women, performed the journey from Lima to Ayacucho, a distance of more than 300 miles, in a very hurried manner. Certain battalions returned from Lima, touching at Islay—a seaport, at the time infected with yellow fever—on their homeward route to Puno and Cuzco. Many dropped sick on the long and ill-provided march; and at length, in Sicuani, in the department of Cuzco, the epidemic broke out in July, 1855.

Dr. Smith divides the epidemic into the forms of the "benignant or simple hæmorrhagic," the "bilious or icteric," and lastly the "nervous or ataxic," the symptoms of each of which he minutely describes.

In September, 1854, just one year after the outbreak of the epidemic at Yurma, the government of Peru, then agitated by civil war, had its attention drawn to the alarming spread of the disease in the Northern department of Ancachs. It was resolved, therefore, to send a medical commission to Huaras, the capital of that department, which soon learnt from the prefect the enormous extent of the malady, and the mortality that had attended it. In a memoir of this mission by Dr. Daza, one of the commissioners, he observes—"All the concurrent reports regarding the commencement of the epidemic of Conchucos are perfectly uniform in their details; at least they are agreed in admitting that a deserter was the first who imported the disease into this province. It is generally allowed by the principal people that in the month of September, 1853, a soldier deserter, on his way back from Lima, was first taken ill of it at a farm called Chilcalbamba. This fever was of a kind unknown in the province. It presented the peculiarity of the whole body becoming of a deep-yellow colour, and of being accompanied with a profuse emission of blood from the nostrils—symptoms never before witnessed in these parts." The inhabitants of Chilcalbamba were shortly afterwards attacked by the same form of fever. The disease then spread from Chilcambamba and Yurma, as a central focus, radiating in different directions, with the slow, and up to a certain extent stationary, progress of a contagious disease.

Dr. Smith then noticed the transmission of the fever across the Cordillera to Yungay, Caras, and other places, as described by Dr. Mariano Macedo, and traceable to the infected fugitives from Yurma.

Mr. Allegre, in a letter to Dr. Smith, states that at Caras in 1856, black vomit had not been observed, except in individuals who came there contaminated (*contagiados*) from the coast. It was in the same manner that in 1853 the yellow fever of the coast, when transmitted to the Sierra, did not manifest black vomit; but, instead of this symptom, red and violet coloured spots on the skin, which were the unerring sign of death. It appears from this, observed Dr. Smith, that at the elevation of Caras, which is about 7000 feet above the level of the Pacific Ocean, the blood poison of the coast directed itself chiefly to the cutaneous capillaries in preference to those of the stomach.

Leaving the fertile and cane-growing country of Caras and Yungay, and crossing the triple chain of the Andes, Dr. Smith proceeded to trace the disorder to the warm and dry valley of Huanuco, a district which is irrigated by the River Huallaga. The pestilence indeed not only invaded the Pacific side of the Andes, but also extended to the Atlantic slope in the mountains of Huanuco and Magobamba, following the course of the Rivers Huallaga and Maranon. Dr. Smith next followed up the disorder to other localities and elevations, where, notwithstanding some modifications due to climatic influences, it preserved its general and distinctive character.

This elaborate paper concluded with observations on the treatment and pathological appearances of the disease.

A discussion followed, in which Dr. Babington, Mr. Radcliffe, Dr. Milroy, and Dr. M'William took part, all of the speakers concurring in the great value of the paper, as containing probably all the knowledge that exists of the epidemics in those Andine regions of which it treats.

## ABERNETHIAN SOCIETY.

AT the meeting of this Society, which was held on the 23rd ult., the president, Mr. Coleman, in the chair,—

Mr. VERNON related the case of a boy, aged four years, who was the subject of a very slight scalp wound, followed by erysipelas of surrounding parts, and after an interval of three weeks by symptoms of inflammation of the brain's membranes, succeeded by convulsions, hemiplegia, and coma; terminating, however, in complete recovery. He was admitted into St. Bartholomew's Hospital, under the care of Mr. Wormald, in July last, for the erysipelas, which subsided under simple treatment. He apparently recovered his health, and the wound, covered with healthy granulations, appeared to be closing up satisfactorily. Suddenly he again failed, and became very drowsy and listless, with dilated pupils and a labouring pulse. Calomel in frequent doses was administered, and with such good effect that the symptoms cleared off, and in a few days the mercury was discontinued; on this being done, the symptoms returned with renewed strength, to be followed by general convulsions, loss of power over the left side (more especially of the left arm), and coma. The calomel was again exhibited every two or three hours, and a blister applied to the back of the neck. Again the symptoms yielded, and he gradually regained his perfect health, and left the hospital quite well. The condition of the wound varied: during the manifestation of the head symptoms the discharge ceased and its surface became glazed; and on the disappearance of the symptoms the discharge returned, and eventually the wound completely closed.

The discussion which ensued was to decide the amount and nature of the lesion which had followed the original injury, and whether or not the symptoms were due to irritation of contused bone, or to extension of erysipelas inwards from the scalp to the meninges.

The case illustrated well the remark that "injuries of the head are never too trivial to be despised, and when followed by symptoms, however severe, are never to be despaired of."

Mr. MARSH brought forward the case of a man who fell upon the step of an omnibus in motion. He suffered intense pain in the side, and came shortly afterwards to the hospital, into which he was admitted, under the care of Mr. Skey. No fracture of any rib could be detected. Two or three days after admission his dyspnœa increased and pneumothorax developed itself. He died, and the autopsy revealed an opening into the lung, which had evidently been the cause of the pneumothorax, but had occasioned no hæmoptysis.

# Reviews and Notices of Books.

*A Practical Treatise on Inflammation of the Uterus, its Cervix and Appendages, and on its Connexion with other Uterine Diseases.* By JAMES HENRY BENNET, M.D., Physician-Accoucheur to the Royal Free Hospital, &c. 4th edition, pp. 600. London: Churchill.

VERY nearly nine years have elapsed since we noticed the third edition of this work, and strongly recommended it to our readers. As the issue then published gradually became exhausted, Dr. Bennet determined to extend his researches, so as to make his book a complete treatise on uterine pathology. Unfortunately, the resolution thus formed was arrested by severe and prolonged illness; and even now, with health partially restored, Dr. Bennet is only able to pass some five or six months of the year in England. It would therefore be most unwise for this gentleman at present to undertake any arduous literary work, and hence we must be contented with receiving

his original treatise, carefully revised so as to bring it up to the standard required at the present time.

The chief features in Dr. Bennet's writings are the importance which is attached to the physical means of investigating uterine diseases, and the high value which he places upon local treatment. This physician regards inflammation and ulceration of the neck of the uterus as the *fons et origo* of several of the diseases to which women are liable, as the cause of many laborious pregnancies and abortions, and as being frequently the source of mischief at "the change of life." In a former edition he remarked—"The descriptions of uterine disease which I have given are the expression of facts truly observed and faithfully reproduced, and will hold good alike *in all climes*, in all lands, and in all grades of social life." This assertion the author now corroborates by the testimony of medical men who have practised in tropical climates. Amongst others, Dr. D. S. Stewart, late Professor of Midwifery at Calcutta, communicates a memorandum of the condition of the genital organs in the bodies of fifty native women who had *died of various diseases*. From this it appears that the organs were healthy in only twenty instances; while in fifteen cases out of the fifty there was inflammatory ulceration, and in several other examples the cervix was inflamed and indurated. Again, Dr. Scott was for many years physician to an obstetric hospital for native women at Madras, during which time he saw many hundred cases of uterine inflammation similar to those described in Dr. Bennet's work. So also Mr. A. Goodall, late superintending surgeon on the Madras Establishment, confirms the opinion as to the frequency of inflammatory and ulcerative disease of the womb among the native females of India, and states that he has often had to examine thirty cases in a single morning. Other physicians have likewise given evidence with reference to the frequency of these forms of uterine malady amongst the women of South America.

Comparing these facts with his own experience, Dr. Bennet seems disposed to believe that uterine and ovarian diseases of an inflammatory character are more common and of greater severity in warm climates than in our own. It is certain that when European females who have suffered from uterine disease in a tropical climate reach home, the malady is often cured with difficulty; since such patients are not uncommonly under the influence of other disorders—fever, dysentery, hepatic congestion, &c.,—and it is useless to attempt a permanent relief of the uterine affection by local remedies until the dysenteric irritation and the febrile constitution are entirely removed.

"It is such cases as these more especially," says Dr. Bennet, "that teach the practitioner to take into his consideration *all* the features of the patient's condition—the general and medical, as well as the local and surgical. He also learns, through them, patience; not to be too sanguine as to early final results, and not to make promises which may not be verified within limits imprudently fixed. In these unfavourable cases I have always found that the best course to pursue is to put the facts clearly before the patient, as they would be put by a physician to his pupils in a clinical lecture, and to promise nothing, unless it be to use in her behalf every possible means which the knowledge of disease gives the well-informed physician."

In comparing the present volume with that published in 1852, we find it is increased in size by some seventy pages, and gives some extra illustrations of the author's views, together with those reports on uterine disease as it occurs in tropical climates to which we have just directed attention. It only remains, therefore, to say that to such practitioners as have not already studied Dr. Bennet's writings, the careful perusal of this volume may be strongly recommended, for we have no hesitation in expressing the opinion that it must be regarded as a most valuable contribution to medical science. Indeed, it may fairly be said that Dr. Bennet's writings have given a more active and a more accurately determined impulse to the study and understanding of the diseases to which females are liable, than those of any other author of the present century.

*Clinical Surgery.* The Surgery of the Mouth, Pharynx, Abdomen, and Rectum, including Hernia. By THOMAS BRYANT, F.R.C.S., Assistant-Surgeon and Lecturer on Operative Surgery at Guy's Hospital. Part III. pp. 153–253. London: Churchill. 1861.

MR. BRYANT continues his analysis of cases occurring in Guy's Hospital during seven and a half years, and we glean some interesting facts from his records. The latter part of the pamphlet—that treating of strangulated hernia—is naturally the most interesting to practical surgeons, and the extended experience of such a large institution as Guy's is worthy of attention.

Mr. Bryant records, during the period above mentioned, 302 cases of strangulated hernia, of which number 134 were inguinal, 150 femoral, and 18 umbilical. Of these, 26 inguinal, 47 femoral, and 5 umbilical proved fatal, thus showing a decidedly increased mortality in the case of strangulated femoral rupture.

It must not be concluded, however, from this statement that the relative frequency of the different forms of hernia is that stated above; for according to the Report of the City of London Truss Society, "out of every 100 cases, 84 are inguinal, 10 femoral, and 5 umbilical, the fraction being divided between the three." Therefore the proper conclusion is, as the author points out, that "femoral hernia is *far more frequently strangulated* than inguinal, by at least 34 per cent."

It is, we think, to be regretted that the author has complicated his paper by endeavouring to strike per centages out of every fact. Per-centages, no doubt, are useful for comparison, but then they must be struck from very large numbers; and when this is not the case, there must be erroneous impressions conveyed by this method of proceeding. Thus Mr. Bryant takes 21 "recent" cases of femoral hernia, and says in 13 or 62 per cent. the sac was not opened, and in 8 or 38 per cent. the sac was opened; and wishes us to conclude therefore that opening the sac is a most dangerous proceeding, as proved by the above per centages. This we must decline to accept as conclusive until a larger number of cases than 21 has been brought to bear upon the question.

Again, the effect of giving per-centages instead of whole numbers is to complicate the tables in the most desperate manner, and to lead to what at first sight seems to be a contradiction, which is increased by the fact of the author's having placed in one table a number of per-centages calculated upon different bases. Thus in the table of Strangulated Femoral Hernia, page 217, it is only by the most careful study of the previous pages, and by working out the calculations for himself, that the reader can attain to anything like an understanding of the results intended to be educed. Many of the recorded cases are interesting, and illustrate well the different points of treatment; but there is one fact brought out for which we were certainly not prepared—viz., that 10 per cent. of the cases of strangulated femoral hernia *reduced by taxis* subsequently die. If this is really the case at Guy's, we think it should be taken as a warning against the so frequent employment of that method in preference to operation.

We have been surprised to meet with no notice of the radical cure of hernia in Mr. Bryant's pages. Are we to conclude that the surgeons of Guy's have no experience upon the subject to offer? But then, again, there is no mention made of the cases of gastrotomy which have occurred in that institution.

Notwithstanding some deficiencies, Mr. Bryant's pamphlet is, on the whole, highly creditable to his industry. It is a work that will be found useful not only to students, but to young practitioners.

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DEATH OF M. MENIERE.—This eminent physician has just died at Paris, of pneumonia. He enjoyed a world-wide renown as director of the Paris Institution for the Deaf and Dumb, and had enriched periodical medical literature with writings of a most instructive kind.

# THE LANCET.

LONDON: SATURDAY, FEBRUARY 15, 1862.


THE opinions of all competent judges concerning the proper site for the reconstruction of St. Thomas's Hospital are rapidly concentrating to one point; and that point is the right one. The governors of the hospital, compelled by the actual invasion of their wards by the pioneers of the new railway, have advertised for offers of suitable sites. The primary qualification set forth is, that the site shall not be remote from the present locality. It must be highly satisfactory to all those who know, and feel for, the necessities of the hundreds of thousands of toiling artisans who throng the southern shore of the Thames, to see this official announcement of the decision arrived at by the hospital authorities. This advertisement may be regarded, we trust, as the final settlement of this vexed question. There has been, as is well known, a period of indecision, during which various opinions were agitated, both in and out of the hospital. This was the time for theoretical sanitarians to urge the advantages of building an hospital out of town, and leaving the sick and maimed to find their way to the rural elysium as best they might; for astute *exploiteurs* seeking to aggrandize a sectarian educational institution to insist upon the benefits that would accrue from transferring the endowments of the great Borough hospital to the neighbourhood of the Strand; indeed, this was the time for every enthusiast and for every schemer to demonstrate the superiority of his pet idea. For a while the most ridiculous propositions found support; and had it not been for the steady advocacy of this journal, the rights and the wants of the labouring poor of Southwark would have been altogether overlooked.

We rejoice to find that at length all those whose interests are most nearly concerned are roused to a full sense of the importance of retaining this ancient hospital near its present site. The vestry of St. Mary, Newington—a body representing "80,000 inhabitants, forming part of the vast population of 773,000 persons" occupying the southern portion of the metropolis—have officially and publicly memorialized the governors of the hospital, entreating them to erect the hospital on some convenient spot south of the river. The memorial is an excellent summary of the facts and arguments which make so overwhelming a case for Southwark, so far as these affect the interests of the poor clients of the hospital. They urge with undeniable truth that a great majority of the 773,000 inhabitants of the district obtain their livelihood in the numerous manufactories and workshops scattered over the territory; that these are in the course of their employments peculiarly liable to accidents and disease. They further represent that the great destruction of the inferior class of dwelling houses on the northern side of the river, for the purposes of street improvements, has caused a constantly increasing number of artisans and people in poor circumstances to seek refuge on the southern side. One point of great importance is dwelt upon. The removal of one of the only two hospitals on the south side of the river would render it necessary to carry many persons suffering from serious accidental injury and dangerous diseases through the overcrowded streets of London, thereby incurring greatly increased suffering and risk of life to the patients, and at the same time causing painful scenes in the public streets. The recent catastrophe in Waterloo-road, which in one moment cast fourteen persons, frightfully injured, into St. Thomas's, is a decisive answer to the thoughtless argument of those who contend that a *small* hospital will suffice for the Borough. Any moment may bring forth casualties in that teeming industrial population which would tax even gigantic institutions to the utmost. We do not think it possible to exaggerate the weight of this argument. It will be observed that the Newington vestry, who, it must be admitted, fairly represent the views held by the general public, do not entertain for a moment the notion of the pseudo-sanitarians, that people with fractured limbs, with frightful burns, or prostrated by fever, can be transported a distance of four miles or more to a visionary hospital in the fields. Those may jest at scars who never felt a wound; and those very comfortable persons who can at any moment command the services of physicians and surgeons, and who generally take care to live within reach of all the physical aid they may require, may with great composure contemplate the position of those wretched persons who must either perish unhelped on the spot, or encounter the tortures of rattling their sick bodies or broken bones over miles of road in search of an hospital. No medical man laying claim to experience will venture to deny that a half-mile of travel, a half-hour's delay, will frequently destroy the sufferer's hope of recovery. It therefore becomes a question not only of planting the new hospital as nearly as possible in the centre of the vast army of labourers who look to it for succour when in peril of their lives, but also that the spot selected should be a focus approachable on all sides by good roads, not liable to obstructions of traffic. It is greatly on this ground that we insist upon the pre-eminent advantages of the Surrey Gardens. To this paramount feature of accessibility, the site adds in the highest degree all the other requisites.

A little consideration will show that a considerable area is necessary. There is, in the first place, the hospital proper to be provided for. Not less than 600 beds will be required. To dispose these 600 beds in such a manner as to meet the requirements of modern experience and science will demand a large space. It is doubtful whether the buildings ought to exceed three stories in height, including the basement. It follows that the wards must be spread over a large surface. Then there are the offices—such as the kitchens, store-rooms, and apartments for the nurses and servants. The houses of the treasurer and other officers, administrative and medical, will occupy further space. Then there is the medical school to be provided. This institution, although it must of necessity be in close proximity to the hospital, should occupy detached buildings. Now, we do not hesitate to say that an hospital of this extent and its school, with the necessary space for securing a free circulation of air, providing gardens for exercise, and preserving the hospital buildings from the danger and inconvenience of undue encroachment by surrounding houses or factories, cannot be fitly accommodated on an area less than ten acres in extent. Whatever the site selected, some portion of it must probably be sacrificed in providing approaches. In the immediate vicinity of London-bridge, it seems impossible that an adequate area can be found. To get to London-bridge is itself a task of no ordinary difficulty. The concentration of railways at this

spot, which is already driving the hospital away from it, is certain to bring further pressure upon the immediate neighbourhood, and to render it more and more unfit for an hospital. Yet the necessity is now recognised of finding a site within a reasonable distance of London-bridge. Common sense forbids going far afield. The spot we have indicated is the nearest one that fulfils the requirements of the case. The question is pre-eminently one of public interest, and is a matter for full discussion. It is gratifying to find that it has been regarded in this light by the inhabitants of the Borough. Those who possess influence, or who fill representative positions, were, on the ground of duty to their poorer and dependent neighbours, bound to assert the rights which rest upon three centuries of possession and the overwhelming claim drawn from the perilous conditions under which life in the Borough is held. The vestry of Newington deserves especial praise for its energy and public spirit in this matter. We cannot doubt that, if the occasion should arise, all the other local Boards will, in concert with their members in Parliament, exert themselves to preserve this ancient hospital in their midst. It is said that a difficulty is now discovered in the title of the hospital. It has taken one Act of Parliament to empower the Railway Company to buy; it seems likely to require another Act to enable the Governors to sell.

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IF we do not compose a great military nation, we are certainly a very important maritime one. If we cannot plume ourselves upon possessing a model "Horse Guards," we ought to be able to point to a pattern "Admiralty." If the world has come to expect errors in our military organization, it does not look for failures in our Royal and Mercantile marine. And truly our maritime system is a noble one; were it not so, indeed, neither our geographical position nor our commercial relations could serve to perpetuate its extent and power. "Wherever," said a great warrior, in the anger of surprise, "wood can swim, there I meet with that cursed flag of Eng-"land." And well for us was it that he did so, or even the battles of the Nile and Trafalgar might not have been sufficient to check his ambition. But it is not alone in that department of our maritime service which is of a fighting aspect that every Englishman feels pride. Far from it. He knows that in our mercantile marine are born and nurtured both the matter and the spirit which are afterwards to permeate the body and soul of the Navy. And this is not true of Great Britain alone, but holds good of every other country. Let us know the nature and quality of its mercantile marine, and we can readily deduce its Royal Navy. It would be supererogatory to point to examples. So patent indeed is the truth that out of a merchant service must spring the sinews of a navy, that modern days are witnessing ourselves constantly adding to those fostering cares which tend to improve the relations and condition of the merchant sailor. The value of the latter is now so well known to us, that much is being done both by legislation and private exertion to render the comfort and health of our two hundred thousand seamen as great as is compatible with their peculiar mode of existence.

Sir JAMES GRAHAM, in 1835, gave the country that which may be regarded as the Magna Charta of British sailors—the Merchant Seamen's Act. After being ten years in force, this Act received Lord HERBERT'S amendment, through which the use of lime-juice and sugar, with medicine, "medical comforts," and in some cases even medical attendance, became imperative in the longer voyages. In 1850, a new and improved Act was obtained by Mr. LABOUCHERE: this was the Mercantile Marine Act; an Act pregnant with value to the nation and mercantile interests, as it related not only to the seamen, but likewise to those upon whom devolved the important trust of commanding and controlling them. Later still (1857), these and other Acts were consolidated into one of greater improvement and wider scope,—namely, the Act of the Right Hon. EDWARD CARDWELL. This comprehends all the chief hygienic questions connected with sailors. It regulates the amount of sleeping-space and ventilation; it directs the victualling, the medical attendance and medicine, and insists upon "medical comforts," lime-juice, and sugar being found the sailor. So comprehensive, indeed, is Mr. CARDWELL'S Act that it provides for the examination and for the competency and character of those in charge of life and property, the certificates to be suspended or withdrawn in case of misconduct.

Besides these public provisions for the improvement of the mercantile marine, philanthropic societies and individuals have lent their aid. "Sailors' Homes" have been founded, where the men can get good and cheap lodging, instead of being pillaged and abused in low dens; and Savings Banks have been established, where sailors may store their money, instead of squandering it in a way most piteous to behold.

Amongst those who have helped us to take a scientific view of some important points in the hygiene of sailors is Dr. J. O. M'WILLIAM, the Medical Inspector of her Majesty's Customs. At the meeting of the National Association for the Promotion of Social Science, held at Birmingham in 1857, this gentleman gave an account of the sickness and mortality amongst the waterguard and waterside officers of her Majesty's Customs—a force whose health statistics had up to that time been hardly at all investigated. More recently* he has undertaken to work out a uniform method of obtaining statistical information as to the health of the seamen engaged in the mercantile marine. From amongst several interesting questions which are incidentally discussed by Dr. M'WILLIAM, we would select some observations relating to a comparison between the Royal and Merchant services:—

"The seamen of the Royal Navy and the Merchant seamen spring from the same class. The range of age (from fifteen to twenty-five) is nearly similar in the two services, and both are employed in every quarter of the globe; but in many other respects they are very dissimilarly circumstanced. The longest voyages in the mercantile service rarely exceed eighteen months; while men-of-war are, as a general rule, several, it may be five, years on one station, however unhealthy. In the Royal Navy, where hygiene in this country may be said to have had its birth, there are circumstances favourable to health—as discipline, clothing, cleanliness, good victualling, and, it may be added, breathing space—which as a rule do not exist in the same degree in the other service. The man-of-war sailors have also in all cases medical attendance. On the other hand, the merchant seaman, although much exposed in landing and loading cargoes while abroad, and less under control as regards drinking and other excesses than the man-of-war's man, does not, like him, labour under the disadvantage of long-continuance in a bad climate, and consequently his constitution

* On the Health of Merchant Seamen. By J. O. M'William, M.D., C.B., R.N., &c., Medical Inspector of her Majesty's Customs. Read at the Dublin meeting of the National Association for the Promotion of Social Science, August, 1861, and reprinted from the "Transactions." London, 1862.

gets renovated by comparatively frequent returns to the more healthy latitudes. Making due allowance for the deaths in the merchant service of which we have no account, I think it may be assumed that the merchant seamen are less obnoxious to diseases originating in climatorial causes than the seamen of the Royal Navy; but although exempt from the casualties incident to war, they suffer far more from drowning and violence than the seamen of the Fleet—a circumstance due in a great measure to the comparative rarity of shipwreck in the Navy. The proportion of deaths from drowning and accidents in the Navy is seldom above 5 per 1000 of the whole force employed; while the normal death-rate from such causes in the merchant service seems to oscillate between 8 and 11 per 1000."

In estimating the mortality in the two services respectively, it is necessary to bear in mind that in the Navy, although we do not obtain all the deaths resulting from constitutions impaired in the service, comparatively few escape record; whilst upon the other hand, a very considerable amount of the mortality from the like cause in the merchant service is not ascertainable. We regret to learn that Dr. M'WILLIAM'S researches compel him to admit that some of the provisions of Mr. CARDWELL'S Act, more especially those relating to the promotion and maintenance of health on board ship, are but too frequently either partially or wholly evaded:—

"To ensure the law being strictly and faithfully carried out, it would be necessary to appoint a staff of inspectors at each of the sea-ports of the kingdom and abroad; but it is considered that the duties of such officers would be of so inquisitorial a nature as to be at variance with the spirit of our free institutions, and, moreover, obstructive of that dispatch which is essential to the success of commercial transactions. The difficulty of furnishing adequate inspection at a port like London, for instance, whence some hundreds of vessels may depart in one tide, is urged as insuperable to a measure which, if practicable, could not fail to be productive of beneficial results."

If the health and comfort of the men both of the Royal and Mercantile marine have not as yet received *all* the care and actual supervision they demand, they have yet obtained so much as to make the present condition of the seamen what may almost be termed a luxurious one in comparison with that under which they formerly existed. We cannot have a more vivid, and we believe truthful, description of the mismanagement formerly prevalent in the Navy than is given by SMOLLETT in his "Roderick Random" and in the continuation of "HUME'S History." He tells us that the provision consisted of putrid salt beef (called Irish horse), salt pork, and musty bread. The biscuit moved like a piece of clock-work by its own internal impulse, owing to the myriads of maggots that infested it. The butter was served out by the gill, and looked and tasted like train oil thickened with salt: and though there was water enough to allow each man half a gallon daily for six months, yet a sailor had only a "purser's quart" a day, and this in the tropics, where a gallon would have been scarcely sufficient to repair the waste from perspiration. We cannot wonder that under such circumstances Lord ANSON should have lost one half of his crew by scurvy within six months. So badly, indeed, were ships formerly provided for, and so faulty was the general arrangement, that in 1726, when Admiral HOSIER sailed to the West Indies with seven ships, he buried his ship's company twice, and then died himself of a broken heart. Now, this sailor's plague—the scurvy—has been banished for some years from our Royal Navy, with the single exception of the ships which have been engaged in the longer Polar voyages. Even under the latter circumstances, Dr. ARMSTRONG succeeded in preventing its appearance for two years and a quarter in the *Investigator*, though the men, it is well known, were exposed to great and inevitable causes of vital depression. Improved as the state of our merchant sailors has been, yet scurvy is still allowed to play a not unimportant part in it. It still causes, according to Dr. M'WILLIAM, considerable mortality amongst the seamen; and if our readers will refer to some late papers by Dr. STEPHEN WARD (Physician to the *Dreadnought*) which appeared in this journal at the latter end of 1860, they will find ample illustration of the truth of this fact. We trust, however, that the day is not far distant when the sailor of the merchant service will be as abundantly cared for in all respects as is his fellow of the Royal Navy.

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SCANTY must be the experience, or stony the hearts, of those who refuse to acknowledge that privation—using the word in its wide sense, including starvation and cold—plays a large part in the causation and persistence of disease amongst the poor. The Poor-law surgeons are, however, engaged in a perpetual struggle in enforcing this truth upon reluctant boards of guardians. A little animal food, milk, eggs, perhaps a little brandy, are often of infinitely greater curative and restorative moment than all the drugs in Apothecaries' Hall. But applications for "comforts," as they are called, are met by a stern discouragement. The doctor's business is to cure with physic; at least so argue the "guardians." So well has this doctrine been practised and taught in Bethnal-green and some other metropolitan parishes, that we have lately seen medical officers appealing to public benevolence for the means of administering the aids to medical relief to their pauper patients. For this Dr. MOORE has been duly rebuked. He was wrong in blazoning abroad the fact that poor people, placed under the official protection of his board, were perishing for want of the means of recovery. He ought to have applied to the board, and not to anyone else; the board would have given instant relief; and so forth. We can, however, knowing something of the extreme rigour with which the workhouse test is carried out in Bethnal-green, very well believe that Dr. MOORE was justified in taking that step which offered the speediest and most effectual relief. The bold and humane course he has adopted, and the public discussion that has arisen out of it, will, we have no doubt, have the wholesome effect of shaming the board of guardians into doing for the future that which their relieving officer, in indignant terms, professes has always been done.

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# Medical Annotations.

"Ne quid nimis."

## HEALTH OF THE TROOPS IN CANADA.

THE reports which reach us of the careful medical supervision of the troops for Canada, and the consequent good health of the men dispatched thither, are of a kind which must be in the highest degree satisfactory to the nation and honourable to the head of the Army Medical Department and the medical officers of the Canadian Depôt who have acted under his orders. The precautions taken were indeed extraordinary. Each man had served out to him the following amount of extra clothing:—Two pairs of woollen drawers, two pairs of worsted

stockings, two merino under-vests, one chamois-leather waistcoat, one Jersey, one pair of sealskin mits, one sealskin cap with ear muffler, one sheepskin over-coat, and one pair of Canadian boots; also for the sleigh, in addition, one pair of fur and buffalo robes. The transit in ships was arranged with perfection, and when the men arrived they found the most elaborate and thoughtful provision for their comfort and protection from the cold.

Dr. M'Illree, the Deputy Inspector-General of Hospitals in Canada, with the assistance of Surgeon-Major Wood, appears to have carried out the instructions received from Dr. Gibson, the Director-General of the Army Medical Department, with zeal and intelligence. Stations were provided every thirty miles along the route, and small hospitals for the sick were fitted up. Further arrangements were made, where advisable, at farmhouses on the road for the reception of stragglers, and small depôts for medicines and medical comforts. Huts were erected for sleeping, properly warmed, ventilated, and planked; and thus the men were well lodged, and preserved from the demoralization consequent upon being mixed up with the civil population. Dr. Muir, with Dr. Rutherford (the sanitary officer), went over the route before the troops, and put the finishing touch to the arrangements. The men had warm coffee and a meat breakfast, hot rum-and-water with their lunch, and hot coffee with their supper. Their rations were increased to the degree which the greater demands of cold required. Thus it was ordered by the home authorities that the daily ration of fresh meat should be increased up to a pound and a quarter, or, if necessary, a pound and a half. Valuable general sanitary directions were circulated, and the medical officers were warned to be on their guard against pneumonia.

The general results as to health have been, up to the present time, excellent. We believe that the ratio of sickness to strength has scarcely amounted to two per cent. This is a result which shows that the Medical Department has merited well of the country, and has performed a difficult duty thus far with entire success.

## DR. JENNER IN HYDE PARK.

DURING the last week the public have been surprised, on visiting Kensington-gardens, to find the statue of the illustrious Dr. Jenner standing, or rather sitting, with its usual air of placidity, on a new pedestal in the vicinity of the stone bridge spanning the Serpentine, on the Bayswater side. The statue, it will be remembered, was some time ago promoted to a distinguished place near the Nelson column in Trafalgar-square, but it has been suddenly removed to its present position in Hyde-park. It is difficult to enter into the motives for this change of locality. In Trafalgar-square the statue had at least a site next to the College of Physicians; and if the combination, arms and preventive medicine, was not peculiarly appropriate—if the saviour of thousands of lives was not well supported by the heroes of a thousand fights—yet its position on a site partially devoted to the memorials of public worth to some extent reconciled this incongruity. Those who had deserved well of their country and of mankind were of one kin, and, saviour or slaughterer, might be mingled in one common tribute of public gratitude. It is hard to conjecture why the illustrious physician and benefactor of his race should be seated amid the flowery walks and grassy glades of Kensington. There, indeed, he may seem to survey the calmly grazing herds from which his science drew the lesson by which mankind has so greatly profited. But in a pleasure-garden overlooking the resort of fashion and frivolity, within ear-shot of the dulcet strains of the last new valse or the favourite ballad of the season, played by the crack military band for the delectation of the fair of Mayfair, the effigy of this grave physician must seem strangely misplaced. Happily, however, it is beyond the power of any official stupidity or individual crotchet to place the statue of Jenner anywhere within the ken of humanity without its being able to impose respect and to appeal for gratitude from the passers-by. Even here let Delia pause, and, with no mocking smile, remember that to that plain man of science she owes perhaps the unspotted bloom of her peachy cheek; and let Hyacinth, of the Guards, consider that to Jenner he may be grateful that inglorious scars not bravely won do not disfigure his comely features.

## ARMY OF THE POTOMAC.

FROM the elaborate report of Mr. Olmsted, the indefatigable Secretary of the American Army Sanitary Commission, the general sanitary state of the Northern Army may be clearly learnt, and important hints gathered for the guidance of our own authorities. In 105 regiments, the camp hospitals were in good order, and in 26 they were in bad order. The remainder were indifferent. The health of the forces was not what it ought to be. The mortality in the army of the Potomac during the summer months averaged 3¼ per cent.; and for the whole army it is stated at 5 per cent. In the army of the Potomac the average constant number of sick per 1000 men has been 63; in the department of Western Virginia, 152; in the valley of the Mississippi, 116. So that in order to maintain an active force of 300,000, about 320,000 men must be kept in the field. The following statement affords the means of comparison with our army in the Crimea from April 10th, 1854, to June 30th, 1856:—

| | Army of the Potomac. Per cent. | Army of the West. Per cent. | Army of the Crimea. Per cent. |
|---|---|---|---|
| Zymotic diseases ... | 61·1 | 76·4 | 69·8 |
| Constitutional ... | 1·2 | ·6 | ·5 |
| Local ... ... ... | 30·7 | 17·3 | 15·6 |
| Developmental ... | 3·4 | 3·5 | ·1 |
| Violence ... ... | 3·6 | 2·2 | 14·0 |

Two most important facts, it is remarked, appear in this table: first, the immense disproportion between cases of disease and of violence, fully justifying all that has been asserted as to the loss which an army in the field sustains from these causes respectively; and, secondly, the great excess of zymotic diseases—nearly all of which are, in a greater or less degree, preventable by proper precautions. These have not been taken in the case of the army of the Potomac. There had been no general revaccination of the army, and the men were crowded in unventilated tents. The largest proportion of typhoid diseases was reported amongst regiments sleeping on indiarubber blankets; the least with those on straw or boughs. We do not, however, attach great importance to that observation. The largest proportion of catarrh was with regiments on wooden floors; the least with those on the ground. The largest of rheumatism with those on wood; the smallest with those on straw or boughs. The largest of malaria with those on the ground; the smallest with those on straw or boughs. Many other circumstances need, however, to be considered in this matter.

## THE CENSOR CENSURED.

THE Rev. Julian Young, of Torquay, recently gave a reading of "Hamlet" at the Mechanics' Institute for the Torbay Infirmary, at the request of the managers. The lecture realized £15 15s., which was handed over to the Infirmary, and the governors at their weekly meeting passed a vote of thanks to him for his kind and valuable aid to the cause of suffering humanity. But it is stated that, in consequence of doing this act, the Bishop of Exeter, who is apparently strongly opposed to all forms of dramatic composition, has prohibited this clergyman from preaching in his diocese. The governors of the hospital are naturally much grieved at this circumstance; and indeed everyone must regret that it should have been thought necessary to enforce views, which are certainly of a very extreme and unusual character, to the injury of a gentleman who

was carrying out a work of public utility and benevolence. The tragedy of "Hamlet" is not commonly considered to be otherwise than an honour to our national literature; and if the Bishop of Exeter entertains other than the usual views on this subject, it was yet a particularly unfortunate and ill-chosen occasion for punishing the public reading of that masterpiece, when the effort was made on behalf of a cause of the most unadulterated good, and the most unsectarian charity.

## SECONDARY EFFECTS OF ACCIDENTS.

A CASE was tried in the Court of Common Pleas on Wednesday, in which a lady's-maid of the Duchess of Montrose, who received a severe blow upon the right side in a collision on the London and North-Western Railway, Nov. 15th, 1860, claimed damages for the secondary effects of the injury sustained. She was able to attend to her duties until the following January. Dr. Tyler Smith said that a swelling formed on the right side; that consumptive disease of the lung had set in, and would, in his opinion, ultimately cause her death. The patient was the subject of recent phthisis, which had apparently set in since the accident. There was now spitting of blood, and, in his opinion, she would never again be fit to fill her former situation. Damages were awarded to the extent of £700.

Another case tried this week in the Court of Queen's Bench, before Mr. Justice Blackburn, illustrates the important bearing of the remarks recently made in THE LANCET Report on the subject of Secondary Effects of Accidents. In this case (English *v.* the North London Railway Company) it was shown that while the immediate effects of the fracture of ribs, bruising and wounding of the knee and back, were relieved by proper care within a short time, the results of the serious concussion were the really important source of disablement. Loss of memory, giddiness, and defective sight, still existed, and the general health appeared to be affected. Damages of £200 were given.

It is clear that the attention of surgeons must in these cases be directed carefully to the examination of the nervous system; and concussion enters so largely into the ultimate and permanent injuries sustained, that the companies will find their pecuniary account in padding their seats and carriages of all classes, so as to limit to the utmost the violence of the shock occurring at the moment of accidents. Meantime the health of the travelling public would be favourably influenced by this reform.

## MORTALITY IN THE LONDON AND PARIS HOSPITALS.

*To the Editor of* THE LANCET.

SIR,—In your able leading article in last week's journal, on the comparative rates of mortality in the London and Parisian hospitals, one important item is omitted in the estimate,—namely, the comparative strength of constitution or vital endowment of the class of patients admitted. The superiority of the English over the French, arising from the more nutritious diet in health, is alone sufficient to account for the difference in the rate of mortality; just as the death-rate in the population of London is lower than that of Paris.

Upon the subject of warming and ventilating the wards of an hospital, the combination of two modes will be found effectual. The one is by means of large inverted basins inserted on a level with the ceiling, with an aperture in the apex connected with an horizontal tube extending between the joists to the chimney or the open air, for the middle wards; and through the roof, for the attics. The other mode is by the adoption of Cundy's open firegrate stove, which warms and ventilates, by the admission of a volume of fresh air, through an air-channel, equal to that which passes off by the combustion of the fuel. Both are perfectly automatic. The advantages of this combined plan are: warmth without closeness; ventilation without draughts; economy of fuel with a cheerful open fire.

I am, Sir, yours &c.,

February, 1862. M.D.

THE

# ANALYTICAL SANITARY COMMISSION.

RECORDS OF THE RESULTS OF

MICROSCOPICAL AND CHEMICAL ANALYSES

OF THE

SOLIDS AND FLUIDS

CONSUMED BY ALL CLASSES OF THE PUBLIC.

## BREAD,

## AND ITS ADULTERATIONS.

THE following analyses were undertaken for the purpose of determining whether alum is still commonly added to Bread, and also the proportions in which it is used:—

RESULTS OF THE ANALYSIS OF THIRTY-TWO SAMPLES OF BREAD FOR ALUM.

At the time of analysis the breads had become dry and stale. This should be borne in mind, as, in consequence, the amount of alum in 1000 grains of the bread, which was the quantity subjected to analysis, was proportionately increased.

*1st Sample.*

Purchased at the establishment of—Mr. Stevens, Cambridge-road, Hackney.
No ALUM.

*2nd Sample.*

Purchased at the establishment of—Mr. Hill, Red House, Bishopsgate-street Within.
No ALUM.

*3rd Sample.*

Purchased at the establishment of—Mr. G. Elphinstone, 21, Throgmorton-street, City.
No ALUM.

*4th Sample.*

Purchased at the establishment of—Mr. Nevill, Central Depôt, 16, Holborn-hill.
Contains *alum* in the proportion of 82·91 grains to the 4 lb. loaf.
A second loaf purchased some days subsequently, contained a still larger amount of alum.

*5th Sample.*

Purchased at the establishment of—Mr. Robb, 79, St. Martin's-lane.
No ALUM.

*6th Sample.*

Purchased at the establishment of—Mr. W. Cook, 199, Piccadilly.
No ALUM.

*7th Sample.*

Purchased at the establishment of—Mr. Stewart, 46, Bond-st.
No ALUM.

*8th Sample.*

Purchased at the establishment of—Mr. Bonthron, 106, Regent-street.
Contains a small quantity of *alum*—namely, 25·91 grains to the 4 lb. loaf.
A second loaf purchased a few days afterwards furnished a nearly similar result.

*9th Sample.*

Purchased at the establishment of—Mr. J. Elphinstone, 227, Regent-street.
No ALUM.

*10th Sample.*

Purchased at the establishment of—Mr. Bragg, 2, Wigmore-street, Cavendish-square.
No ALUM.

*11th Sample.*

Purchased at the establishment of—Mr. Sapsford, 20, Queen Anne-street, Cavendish-square.
No ALUM.

*12th Sample.*

Purchased at the establishment of—Mr. J. Cook, 48, Edgware-road.
No ALUM.

*13th Sample.*

Purchased at the establishment of—Mr. Weston, 128, Edgware-road.
No ALUM.

*14th Sample.*

Purchased at the establishment of—Mr. Withers, 86, Blackman-street, Borough.
Contains *alum* in the proportion of 82·91 grains per 4 lb. quartern loaf.

*15th Sample.*

Purchased at the establishment of—Mr. Cowan, 76, Blackman-street, Borough.
Contains 152·88 grains of *alum* to the 4 lb. loaf.

*16th Sample.*

Purchased at the establishment of—Mr. Bailey, 207, High-st., Borough.
Contains 62·18 grains of *alum* to the 4 lb. loaf.

*17th Sample.*

Purchased at the establishment of—Mr. Bishop, 172, High-st., Borough.
No ALUM.

*18th Sample.*

Purchased at the establishment of—Mr. Hills, 78, St. George's-road, Southwark.
Contains 85·50 grains of *alum* to the 4 lb. loaf.

*19th Sample.*

Purchased at the establishment of—Mr. H. Blake, 26, Westminster-road.
Contains 103·65 grains of *alum* to the 4 lb. loaf.

*20th Sample.*

Purchased at the establishment of—Mr. Goedecker, 27, Bridge-road, Lambeth.
Contains 106·24 grains of *alum* to the 4 lb. loaf.

*21st Sample.*

Purchased at the establishment of—Mr. Blatchley, 10, Chel. tenham-place, Westminster-road.
Contains 85·50 grains of *alum* to the 4 lb. loaf.

*22nd Sample.*

Purchased at the establishment of—Mr. Harnor, 6, Lower Marsh, Lambeth.
Contains 82·91 grains of *alum* to the 4 lb. loaf.

*23rd Sample.*

Purchased at the establishment of—Mr. Wertzell, 8, Crawford-street, W.
No ALUM.

*24th Sample.*

Purchased at the establishment of—Mr. Schwenk, 75, Crawford-street, W.
Contains 98·46 grains of *alum* to the 4 lb. loaf.

*25th Sample.*

Purchased at the establishment of—Mrs. Wyman, 105, Crawford-street, W.
No ALUM.

*26th Sample.*

Purchased at the establishment of—Mr. Zoller, 14, Homer's-row, Crawford-street, W.
Contains 69·96 grains of *alum* to the 4 lb. loaf.

*27th Sample.*

Purchased at the establishment of—Mr. Fuchs, 37, Crawford-street, W.
No ALUM.

*28th Sample.*

Purchased at the establishment of—Mr. Kirkby, 45, Crawford-street, W.
Contains 38·86 grains of *alum* to the 4 lb. loaf.

*29th Sample.*

Purchased at the establishment of—Mr. Kirkby, 45, Crawford-street, W.
Contains 158·06 grains of *alum* to the 4 lb. loaf.

*30th Sample.*

Purchased at the establishment of—Mr. Robinson, 30, Skinner-street, Somers-town.
Contains 98·46 grains of *alum* to the 4 lb. loaf.

*31st Sample.*

Purchased at the establishment of—Mr. Burrows, 21, Skinner-street, Somers-town.
Contains 44·05 grains of *alum* to the 4 lb. loaf.

*32nd Sample.*

Purchased at the establishment of—Mr. Bate, 80, Brewer-street, Somers-town.
Contains 90·69 grains of *alum* to the 4 lb. loaf.

These results will be more readily appreciated by an examination of the subjoined table:—

*Table showing the quantities of alum detected in the 4 lb. loaf, and calculated to the sack of ninety-two 4 lb. loaves.*

| Name. | Per 4 lb. loaf. Grains. | Per sack of ninety-two 4 lb. loaves. Oz. | Drs. |
|---|---|---|---|
| Nevill | 82·91 | 17 | 4 |
| Bonthron | 25·91 | 5 | 4 |
| Withers | 82·91 | 17 | 4 |
| Cowan | 152·88 | 32 | 2 |
| Bailey | 62·18 | 13 | 1 |
| Hills | 85·50 | 18 | 0 |
| Blake | 103·65 | 21 | 8 |
| Goedecker | 106·24 | 22 | 4 |
| Blatchley | 85·50 | 18 | 0 |
| Harnor | 82·91 | 17 | 4 |
| Schwenk | 98·46 | 20 | 7 |
| Zoller | 69·96 | 14 | 7 |
| Kirkby | 38·86 | 8 | 1 |
| Kirkby | 158·06 | 33 | 2 |
| Robinson | 98·46 | 20 | 7 |
| Burrows | 44·05 | 9 | 2 |
| Bate | 90·69 | 19 | 1 |

It thus appears, that of the thirty-two samples subjected to analysis, *seventeen*, or *more than one half*, contained *sulphate of alumina and potash*, commonly known as ALUM.

The quantities ranged per quartern loaf between 25·91 grains and 158·06 grains, and per sack of ninety-two 4 lb. loaves between 5 oz. 4 dr. and 33 oz. 2 dr.

It appears further, that as the rule, to which there are some exceptions, the more respectable high-priced bakers, who buy the best flour and sell superior bread, do not make use of alum, for the employment of which no necessity whatever exists.

The principal reason why alum is so generally used by the bakers who sell cheap bread, is, that they are thereby enabled to impart to much less costly flour, when made into bread, the colour and appearances which, without the alum, can only be obtained by means of a flour of superior quality and higher price.

That the addition of a powerful substance like alum, and in the large quantities detected in the above analyses, is prejudicial to health, and is productive of dyspepsia and other derangements of the digestive organs, is well ascertained.

The adulteration of bread with alum is contrary to law, and bakers using that substance are liable to punishment. This offence is punishable not only under the Bread Act, but under the recent Act for the prevention of adulteration. The former Act is sometimes—that is, rarely and at long intervals—enforced, but the latter is, as respects the adulteration of bread, as of other articles, inoperative. It is, therefore, obvious that the law is at present wholly ineffectual in putting a stop to a very scandalous and injurious adulteration of a prime article of daily consumption.

# Correspondence.

"Audi alteram partem."

## THE INFLUENCE OF RAILWAY TRAVELLING ON PUBLIC HEALTH.

### CONGESTION OF THE BRAIN RESULTING FROM RAILWAY TRAVELLING.

*To the Editor of* THE LANCET.

SIR,—My personal experience with regard to the effects of railway travelling may be given briefly. When perfectly well I find no inconvenience from it; but if I am below par, or suffering from any congestion of the brain, the result of overwork or dyspepsia, and then take a long railway journey, it is certain to give me a headache, which I do not get rid of for a day or two. I always sit with my face to the engine, next to the window, which as a rule I prefer open, unless the weather is *excessively* cold. I do not think I ever got either catarrh or rheumatism from this exposure, as some would call it. I always read if the distance to be travelled is short, but I am sure that it is hurtful to read for any length of time on the rail. I know a public character who used to read incessantly, even if his journey extended from Liverpool to London; but the result was that he was obliged to give up all brain-work and amuse himself (to use his own words) with the saw and the billhook. I do not mean to say the brain-rest was required solely for the injury done on the rail, for he worked rather too hard at all times; but I am sure that it increased the mischief tenfold. For nearly a twelvemonth he could not read at all without immediately bringing on pain in his head. By rest, change, and very little medicine, he has now nearly recovered, and will, I have every reason to believe, be again able to serve his country in the Senate, if not in the Cabinet. If I am quite well, I can sleep the whole night through almost as well in a railway carriage as in my bed. All these observations apply to first-class carriages. I soon found, even in early life, that I could not endure the rattle and vibration of a second-class carriage. In all cases of congestion of the brain, or a tendency to it, railway travelling is injurious. Only this morning I was visited by a patient, aged sixty-two, who had been suffering from congestion of the brain, which had been completely relieved by medicine and twenty-four leeches to the temples. I had permitted him to go down to Reigate to see about a house previous to his residing there permanently, as he had retired from business, and intended to lead a very quiet life in that beautiful locality. He told me that he had felt perfectly well since his last visit to me, until he travelled up this morning by rail. The motion had reproduced the giddiness from which he had been free for more than a week. This case, perfect in itself, is only one among many that I could adduce in proof of my assertion that a brain disturbed by congestion is injuriously affected by motion on the rail.

I am, Sir, your obedient servant,

Feb. 1862. SAMUEL SOLLY, F.R.S.

### THE EFFECTS OF RAILWAY TRAVELLING UPON UTERINE DISEASES.

*To the Editor of* THE LANCET.

SIR,—The Influence of Railway Travelling on Health is a subject of great interest; but I conceive there will be no other sort of ill effect produced upon the healthy woman than upon the opposite sex. But I should expect, from the more impressionable state of the nervous system in women, that whatever is found to affect this system in man, will do so to a higher degree in them; and I think I have observed this to be true in the course of my practice. There is one sort of accident, however, to which men are liable, and to which the more capacious organization of the woman renders her less exposed: it is, paralysis of the bladder from over-distension. I have met with but one case in which serious mischief arose to a woman from being unable to empty the bladder in a long railway journey. In this case great difficulty was felt at its close in voiding the urine, and much pain in the region of the bladder set in from that period. Ulceration of the mucous coat followed, attended with many distressing symptoms for some months; and the patient to this day attributes her whole distress to her prolonged railway journey. This, however, is certainly not a common occurrence, as the roomy pelvis of the woman enables her to retain the urine for a much longer period than the man, without injurious consequences.

But in cases of uterine disease I have often noticed the ill effects of a long railway journey. One common symptom of an inflamed and ulcerated cervix is the great irritability of the bladder which accompanies it; and to a woman suffering from this disease, railway travelling is frequently a source of unmitigated misery, if not of ultimate mischief. In cases of prolapsus, of retroversion of the uterus especially, and of sensitive tumours of the urethral orifice, the effect of travelling by railway for any considerable distance is undoubtedly injurious, in consequence of the direct application of a series of little concussions to the parts already in an inflamed and tender state. Happily for the female sex, very frequent travelling by rail must be the exception to their ordinary life, or we should hear more of its ill effects. So decided is my opinion of the injury likely to be inflicted by railway motion upon women who are suffering from uterine disorder, that I have refused permission to persons coming up to town for consultation to return again the same day. More particularly objectionable must be the practice (not altogether uncommon) of permitting a patient to travel to London for the treatment of an ulcer of the cervix, and to return again immediately after it has been cauterized—to spend an hour or two of burning pain in a railway carriage!

I would wish to draw attention to one very important point in relation to this subject: it is, the danger of excessive railway travelling to newly-married women. Complaints have been made to me of the constant hurry, excitement, and fatigue of the long railway journeys which are now considered to be proper to the newly-married state. To take a wedding tour of some weeks or months on the Continent no longer signifies the leisurely affair of a quarter of a century ago. It is too frequently one long succession of journeys by rail, broken only by a day or two's rest here and there. I can speak most decidedly of the ill effects of this custom, and I believe it is not unfrequently conducive to the abortions so often occurring amongst newly-married persons. A lady, immediately on her return from a wedding tour of some months, during which Belgium, Prussia, Germany, Switzerland, and France were *done* in the usual manner, placed herself, and is at the present moment, under my care for a severe miscarriage, which she herself attributes to the perpetual locomotion she had undergone.

The remedy for all this is of course a very simple one. The railway cannot be dispensed with, but, even in bad cases of the disorders of women, its unquestionably injurious influences may be reduced to a minimum by the rational plan of breaking a long journey into proper stages, and allowing sufficient rest in the intervals. The arrangements of the *coupon* tickets, for continental travelling, render this plan as perfectly easy and pleasant as possible.

I am, Sir, yours &c.,

ROBERT ELLIS, M.R.C.S.,

Obst. Surg. to the Chelsea and Belgrave Dispensary.

Sloane-street, Feb. 1862.

### EFFECTS OF EXCESSIVE TRAVELLING UPON RAILWAY GUARDS.

*To the Editor of* THE LANCET.

SIR,—Having read in the last four issues of your journal a most interesting and valuable report on the "Effects of Railway Travelling upon the Public Health," I have ventured to trouble you with a brief statement of the experience of a Friendly Society, whose members are principally railway guards, conductors of trains, and travelling inspectors; deeming the information—which extends over a period of twelve years—may not be without some value, bearing as it does specially upon the object of your inquiry.

The members of the Railway Guards' Friendly Society appear to suffer most from the following disorders—viz., bronchial affections, consumption, rheumatism, lumbago, irritation of the

bowels and diarrhœa, erysipelas, and congestion of the brain. These may be taken to represent the effects of railway travelling, exposure to the weather, and excessive physical exertion consequent upon the duties of guards. Some of these men, now running from London to the North of England and Scottish destinations, travel during the year the astounding distance—in round numbers—of 120,000 miles. This, if effected at an ordinary rate of travelling, say fourteen miles an hour, would occupy the whole of the 365 days and nights of the year without cessation; it would, in fact, be perpetual motion, and that at a tolerable speed. Doubtless the peculiar effects of travelling long distances upon railways, at a high rate of speed, are, so far as the above classes of railway *employés* are concerned, considerably modified by the active nature of their duties, especially in the case of guards, who are incessantly employed either in mind or body, and who in the many stoppages of a long journey are bound to render assistance to porters in the removal of luggage, &c., and are thus relieved from the constraint and tedium of a long and uneasy sitting position, which all passengers more or less experience.

The books of this Society present several cases illustrative of the tendency of the members' occupation to induce brain disorders. The most striking is that of James B——, formerly a "conductor" running from London to Edinburgh, and thence back to London, with an interval of rest at each end of his journeys. In March, 1857, this member was laid up with "severe cold," &c., for seven weeks, and again at the end of the following month with "cephalalgia and rheumatism;" and then in the August following he was certified as suffering from "dyspepsia and overfatigue from his occupation." From this date he continued a claimant on the funds until Sept. 15th, 1858, when he died. His medical certificates stated that he was suffering from "nervous debility," "nervous complaint," and "nervous irritation;" and having been certified as incurable under these circumstances, he was considered entitled to the valuable benefit, which I believe is peculiar to this Society alone—namely, *full sick pay for life*. For some time prior to his death he was confined in a lunatic asylum; and it was well known and much spoken of at the time, as a decided case of insanity induced by excessive railway travelling. His journeys were about 4 0 miles each, repeated at intervals; the aggregate in each year would be about 91,000 miles.

A more recent instance, in one of the same class, may be mentioned, where a guard was temporarily disabled from "nervous irritation of the brain." Another, named William T——, a few weeks since, on his journey to the North, was, after complaining of slight indisposition at starting, found dead in the carriage to which he had been removed. The cause of death I am unable to state, as the verdict of the Coroner's jury was—"Found dead."

These are a few of the more prominent cases, and if of any value to the object of your inquiries, you are welcome to their use.

I am, Sir, yours, &c.,

GEORGE GROSVENOR,
Railway Guards' Universal Friendly Society, General Secretary.
29, Southampton-buildings, Holborn, Feb. 1862.

## THE CAUSES AND EFFECTS OF RAPID CHANGES OF TEMPERATURE.

*To the Editor of* THE LANCET.

SIR,—As a frequent traveller upon the much-used suburban line,—the West-end and Crystal Palace Railway,—I have to remark, that the public suffered in health last winter, and is likely to do so this next quarter, from the use of a peculiarly constructed second-class carriage, a very large undivided omnibus, with ten doors and windows, and glazed from end to end on a level with the passengers' heads when seated. They were never originally intended to be used during the winter months, are ill-adapted to the season, and are the prolific cause of rheumatism of head, neck, and shoulders; of colds, toothache, earache, influenza, bronchitis, pneumonia, &c.; and for these reasons:—One strong, hearty individual at the engine end of the carriage has command of his window, and *will* have it down; the consequence is, that some forty-five or more passengers are placed in a cold, shivering draught of air many degrees below freezing point. At every station all the travellers in these carriages are chilled and rechilled by passengers opening the doors for entrance or exit. It will be quite obvious that by smaller compartments being substituted, much of this risk and danger to health would be done away with.

My experience with respect to the third class is, that passengers who very likely get in heated from exercise or work, should have some kind of screen in seasons when the air, much below freezing, is wafted across them with hurricane speed—a high wind being often added to the current of air induced by the rate at which the train is being propelled. On the continent a curtain of sailcloth is in use, and, if cheaper than glass, should be at once supplied to the third-class passenger carriages throughout the country by compulsion under an order emanating from the Government Inspector of Railways, or the Sanitary Board, or the Board of Trade.

The heating of trains by means of the waste steam passing through tubes carried beneath the perforated flooring of all the carriages, would be the greatest boon to the travelling public of these islands at such an inhospitable season as we experienced in the early part of last year. The low temperature of the carriages, especially on short lines, with frequent stoppages in populous districts, must be the source of great detriment to public health, the passengers not being able to have with them a sufficiency of clothing for the very short time it is actually required, compared with the length of time it would prove an incumbrance to business habits or to various exercises of body from compulsion or for pleasure. The floors should be covered with some non-conductor of heat till such time as the carriages are heated by some means.

My experience is that darkness is a very great and serious cause of nervous disturbance, especially in children, and females of hysterical temperament. I propose that the tunnels should all be economically lighted, if only at intervals, and when trains are expected to enter such dark chasms. Two gas-pipes should be fastened to the keying part of the arch, and at intervals smaller tubes should drop from the main tubes to about a level with the upper part of the windows of the carriages, to terminate in a closed dark-lantern with bull's-eye glasses to concentrate light into the interior of the carriages whilst *in transitu*. If the trains are going at the rate of twenty-five miles an hour, a very few such lights would suffice, on the principle of the retina retaining, as it does, the impression for an interval after the receipt of the image. By turning the gas on or off the light might be made a means of signaling to allow trains to enter tunnels, and having the lights in dark-lanterns the glare would not bewilder the eyes of the driver or guard. A cage fixed on the tops of the engine chimneys would prevent large lighted cinders doing the damage they do, and keep dust out of the eyes of the passengers.

I am, Sir, yours truly,

Upper Tooting, Feb. 1862. D. C. NOEL, L.R.C.P.

## ON THE PRESENT CONDITION OF RAILROADS.

*To the Editor of* THE LANCET.

SIR,—I have read with great interest the remarks made in your article on "The Influence of Railway Travelling upon Public Health" in THE LANCET of the 25th ult. I cannot help thinking that the noise and jolting there alluded to, as being the great source of evil to travellers, are occasioned by a weak and enfeebled condition of the road. When railways were first projected, the engines weighed about ten or twelve tons, and trains ran at a speed averaging between twenty and thirty miles per hour. The road at that time was, no doubt, adequate to the weights and speeds run upon it. Now the engines weigh between thirty and thirty five tons, and trains are run at speeds of between fifty and sixty miles per hour, the road meanwhile remaining almost unaltered.

Mr. Hawkshaw, President of the Institution of Civil Engineers, in his opening address to that body the other evening, alluded to the fact that the road at present employed was incapable of sustaining the heavy weights and rates of speed now run upon it, and that the wear and tear, and consequently the annual expenditure for repairs, were enormous. If this be true, it may be inferred that with a better road we should have fewer accidents, less noise and rocking, and consequently more comfort in travelling.

I am, Sir, yours, &c.,

Craven-street, Strand, Feb. 1862. F. M. ROGERS.

## PAYMENT OF FEES TO POOR-LAW SURGEONS.

*To the Editor of* THE LANCET.

SIR,—Will you allow me, through the columns of your publication, to impress upon all medical officers and medical practitioners who have occasion to render medical or surgical services to boards of guardians, the extreme importance of their apply-

ing promptly for payment of their fees. By a recent statute, boards of guardians are empowered to pay all debts and claims due from them within three months of the half year in which they are incurred, but *not afterwards*. The Poor-law Board can, indeed, by an order extend the time, but not beyond twelve months from the date of the debt.

In consequence of their neglecting to attend to this provision, medical officers are constantly losing their fees for vaccination and for operations, which fall within the description of those for which special fees are payable. They delay making their claims until long after the time when the Poor-law Board can render any aid. As a general practical rule, I recommend that the account of all ordinary extra fees should be regularly sent in to the guardians at the close of the quarter in which they accrue, and that the claim for every extraordinary service should be made as soon as that service is rendered. The demand can be at once considered and investigated, and, if legally due, forthwith discharged. Prompt payment is generally so acceptable, that I think those members of the medical profession who have relations of business with boards of guardians, will find a great benefit result from this statute, though many are suffering from the consequences of the enactment at present.

I am, Sir, your obedient servant,

Regent's-park, Feb. 1862. W. G. LUMLEY.

## POOR-LAW MEDICAL REFORM ASSOCIATION.

*To the Editor of* THE LANCET.

SIR,—I beg permission, through the medium of your journal, to inform the Poor-law medical officers that in the House of Commons on Thursday, the 6th inst., Mr. Villiers gave notice "that on Friday next he would move the reappointment of the Committee on the Administration of the Poor Law." It therefore becomes our duty to prepare for the approaching legislation on the medical relief of the poor. The Select Committee will probably recommend, in general terms, the course they think should be adopted; and then the Poor-law Board, on the part of Government, will most likely introduce a Bill, which it is not improbable may be very different from that which we desire. We therefore ought to follow the course pursued by the Coroners on a recent occasion, and have a Bill of our own, and run it against that of the Poor-law Board, should we not approve of theirs, and trust to our influence with the members of the Legislature to get that measure adopted which will be most beneficial to the interests of the nation. But without money it is impossible for this course to be pursued. At the commencement of last year the Association had a balance in hand of £9 18*s.* 2*d.*; and I have since received—students' balance, £11 14*s.* 6*d.*; and subscriptions as follow: one of £5, seven of £1 1*s.* each, eleven of £1 each, three of 15*s.* each, four of 10*s.* 6*d.* each, fifty-two of 10*s.* each, one of 7*s.* 6*d.*, six of 7*s.* each, thirty-seven of 5*s.* each, and three of 2*s.* 6*d.* each; balance overdrawn, 14*s.* 8*d.*: making a total of £88 3*s.* 4*d.* The expenditure was: printing, £34 3*s.*; stationery and books, £5 12*s.* 8*d.*; postage, £4 6*s.* 4*d.*; advertisements, chest for papers, clerks for assistance, local secretaries, expenses of meetings, &c. &c., £44 1*s.* 4*d.*: total, £88 3*s.* 4*d.* Within the last few days I have received one guinea from Dr. Brown of Rochester, being his seventh subscription of a like amount. This gentleman is not a Poor-law medical officer, and therefore deserves our warmest thanks for the great interest he has always taken in our welfare. Mr. Grimbly of Banbury, and Mr. Sanders of Gravesend, have also sent me their annual subscriptions, one sovereign each. These sums, with one guinea as my own subscription, and ten shillings each from Mr. Mallani and Mr. Elkington, are all that we have to start with on our parliamentary campaign; but I have little doubt, now that I have named the subject, that the friends of Poor-law medical reform will freely respond to my call, and thus enable the Association to bring its labours to a successful issue.

I am, Sir, yours, &c.,

Royal-terrace, Weymouth, Feb. 1862. RICHARD GRIFFIN.

## ON THE CONDITION OF THE MOUTH IN IDIOCY.

*To the Editor of* THE LANCET.

SIR,—Mr. Ballard, while admitting the accuracy of my published observations on the mouths of idiots, has thought it his duty to lay claim to having directed my attention to the subject, and to charge me with having purposely omitted allusion to some statements of his in order to avoid the mention of his suggestions in the matter.

I should probably have noticed Mr. Ballard's statements had they fallen within the scope of my paper, and have acknowledged assistance from him if I could have done so truthfully.

My article professed to deal with matters of fact in reference to a specific subject, and not to theories of any kind relating to the etiology of idiocy.

As to Mr. Ballard's directing my attention to the question, the following statement of the case will show that he is not correct. In the autumn of 1858 I commenced a series of observations on the deviations from normal structure and function of the various organs in idiots. In the summer of 1860 my observations were directed, in turn, to the mouth; and the notes were made at my dictation by Mr. A. Brown of more than 150 cases. These observations were resumed in the summer of the following year. In October, 1860, I visited the continent, and on my return found, amongst others, an entry in the visitors' book by Mr. Ballard, dated Oct. 13th, 1860. Up to that time, not only was I unacquainted with Mr. Ballard's views—I was even ignorant of that gentleman's existence. Seeing that I was absent at the time, Mr. Ballard's statement, that on his visit to Earlswood he "entered into a full explanation of his views and observations," &c., is, to say the least, disingenuous.

Amongst the letters awaiting my return I found one from Mr. Ballard, accompanying a copy of his work on "Fruitless Sucking," asking me to furnish him with the notes of my patients, and to allow him to bring a dentist to Earlswood on Sundays to take casts of their mouths, &c. I informed him, as politely as I could, that I was already engaged in a similar inquiry, and for various reasons could not comply with his request.

I may state that the words "the past year" should have been, strictly speaking, "past *years*." I merely wished to indicate that the observations were not made in reference to a recent legal investigation.

I am, Sir, yours truly,

J. LANGDON H. DOWN, M.D. Lond.

Earlswood, Redhill, Feb. 1862.

*To the Editor of* THE LANCET.

SIR,—Having seen a letter from Mr. Ballard in THE LANCET of the 8th inst. on the "Condition of the Mouth in Idiocy," I beg to say that I assisted Dr. Down while making observations on the mouths of patients at Earlswood in the summer of 1860; and as Mr. Ballard's visit did not take place until the month of October in that year, he must therefore be in error in supposing that he was the cause of directing Dr. Down's attention to the subject. I am, Sir, yours faithfully,

Westminster Hospital, Feb. 1862. A. BROWN.

## PROFESSIONAL CHARGES.

*To the Editor of* THE LANCET.

SIR,—The case of Jackson *v.* Gee, which has attracted considerable attention throughout the profession, seems one from which we may expect a general benefit to ensue; will you therefore permit me to aid this issue by the following observations.

The facts are these: One surgeon tries to recover that which in his estimation is a just debt arising from a fair rate of professional charging. Two others, of much longer standing, but nevertheless with no more professional status attaching to them, undertake—on oath be it observed—to declare the charge to be exorbitant; and through their instrumentality the judge is induced to dock the bill to what he and they consider a just amount. Dividing the plaintiff's bill by the number of visits, interviews, "consultations," "advices," or even teas out and teas in if you like, the charge appears to be considerably under 5*s.* for each item entered in the account. But this charge includes advice, medicine, and instruments, likewise surgical appliances, and the cost of the "doctor's boy's" keep, who is found always to guage his appetite exactly in the inverse ratio to his weekly stipend.

Now who is the "cheap doctor"—Messrs. Crossley and Lilley, who find no physic and feed no medicine boy, and yet charge 3*s.* 6*d.* every time they see a patient; or Mr. Jackson, who finds everything above enumerated, and contents himself with a charge of 4*s.* 10*d.*? Is the difference more than a patient would be called upon to pay a counter-quacking druggist?—

who, by the way, recommends only the doctor who feeds his till, and on whom every medical man looks as he would on an enemy until he has by his prescriptions placed himself A 1 in the counter cash-book. If not, then why should Messrs. Crossley and Lilley appear in a court of justice and on oath give evidence which takes away the character of a brother practitioner for honour and integrity?

To charge a man with exacting at law an exorbitant bill is only the equivalent of accusing him of picking a pocket; but to see him convicted on such a charge, and with such evidence, is enough to make professional blood run cold, and exceeds the limits of any physician's, surgeon's, or apothecary's tolerance.

Let us then, among ourselves, insist on having a tariff of charges, recoverable in any court, without the necessity of calling a witness *pro* or *con.*, and we shall hear no more of these disgraceful exhibitions. The public would soon learn that tariff, and would place themselves in our hands without the distrust they now experience.

I am, Sir, yours, &c.,

Feb. 1862. P. H. E. D.

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THE

## ROYAL MEDICAL BENEVOLENT COLLEGE.

*To the Editor of* THE LANCET.

SIR,—When the welfare of a valuable charity is at stake, the greatest prudence and forbearance ought to be observed. I can only regret that Mr. Propert did not perceive that the interests of the Royal Medical Benevolent College would have been better served had he either candidly admitted the charges brought against the governing body, or else disproved them. To avoid their gravamen by disingenuously answering objections that were never raised, and indulging in personal strictures that were unmerited, was trifling with the subject.

Mr. Propert will also, I trust, excuse me for reminding him that this deflection of a noble institution from its professed uses and objects was adduced in reply to an able article that appeared in THE LANCET of the 11th inst., and not gratuitously paraded before the profession for the purpose either of bringing the charity into disrepute, or of wounding his susceptibilities.

Far be it from me to detract one iota from Mr. Propert's well-earned reputation. The College, of which he is the founder, will stand as a monument, to record his worth and excellence, long after the present generation has passed away; but surely it can be no crime to call attention to what may be defective in its organization. We all have, or ought to have, an interest in its prosperity.

Had my example been followed much good might have been done. To understand why 12,000 intelligent—and, we trust, philanthropic—men do not support an institution peculiarly their own, is a kind of knowledge that a sagacious person would have no difficulty in utilizing to some purpose. It is some gain to find Mr. Propert admit that "the mode of conducting the elections is unsatisfactory." We were scarcely, however, prepared for the avowal, that practices, confessedly venal, must be continued until fairer regulations can be *afforded*. Instead of discussing Mr. Propert's impracticable plan, I would respectfully suggest that the Council of the College should ascertain what effect the evil complained of has upon its prosperity. It is our duty to provide for the suffering and the helpless belonging to us, but in such a way as not to miss our aim. It is well known in the provinces that the more destitute and helpless an applicant for admission is, the fewer are his chances of success. An institution with so large a capacity for good must, sooner or later, reform itself, and so command the support of the entire profession.

I am, Sir, your obedient servant,

January, 1862. JUSTITIA.

P.S.—I may add that I subscribed to the College from its foundation, and for several years; that I have never been personally interested in the success of any candidate, and on withdrawing my support, entered a protest against the regulations then in force.

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*To the Editor of* THE LANCET.

SIR,—In THE LANCET of the 11th inst., you appeal, in reproachful terms, to the "12,000" medical men who withhold their subscriptions from the Royal Medical Benevolent College. If you will look over the list of subscribers for 1857, you will there see that I then subscribed a guinea. This I intended to have subscribed annually, and I also intended to have exerted myself amongst my friends, to induce them to subscribe also. But I neither made a second subscription nor did I exert myself amongst my friends. How was this? May I tell you? I supposed that the College was founded to aid the needy of our profession, and that the poorer, the more distressed, the more friendless they were, the greater would their claims upon its funds be considered. But actual observation told me that I was wrong in my surmises. Actual observation pointed out to me that boys whose parents were in affluent circumstances were easily elected to Foundation Scholarships, whilst their poorer and (from their needy circumstances) almost unknown competitors, were time after time rejected. Thus it appeared to me that the Royal Medical Benevolent College was a jobbery and not a charity; so, as I before said, I withdrew my subscription. I would suggest as a remedy, that a Committee be formed to inquire into, and ascertain, that the circumstances of all applicants are sufficiently pressing to entitle them to be considered eligible for election. At all events, let some plan be adopted to secure the election of those *really requiring it*, and I will again subscribe to the College. I will do also what I intended to do—exert myself to my utmost amongst my friends in its behalf. Others of my professional brethren would do so likewise, and thus you would not again have the opportunity of reproaching us for standing aloof from an institution which, if properly managed, we should rally around and zealously support.

I am, Sir, your obedient servant,

Durham, Jan. 1862. ONE OF THE "TWELVE THOUSAND."

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## TREATMENT OF DELIRIUM TREMENS.

*To the Editor of* THE LANCET.

SIR,—A case of delirium tremens in this hospital, in which stimulants and large doses of Battley's sedative solution seem to have increased the excitement, has been successfully treated by large doses of digitalis. The patient was very violent, requiring three male attendants night and day; he took beer or brandy, with a drachm and a half of Battley's sedative solution, about every three hours, and seemed worse after every dose. At length he refused either to eat or drink; and, after twelve hours, was quieter, and consented to take a dose of medicine. Half an ounce of the tincture of digitalis was administered. He was more composed after it, and his pulse fell from 102 to 80. He had no vomiting, no purging, and passed very little urine. In twenty hours afterwards another dose of two drachms was given. His pulse, after six hours, was 60, and the next day had fallen to 46. The patient was then quite composed, and, as he was suffering from a slight attack of bronchitis, was given wine, nourishing diet, and stimulating expectorants, under which he has nearly recovered.

I am, Sir, your obedient servant,

CHARLES HARRISON, M.D.,

Lincoln County Hospital, Feb. 1862. House-Surgeon.

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## THE CHOLERA IN INDIA.

*To the Editor of* THE LANCET.

SIR,—With reference to my letter, "On the Early Treatment of Cholera," inserted in THE LANCET of December 14th, 1861—in which it is stated that as the etiology and the pathology of cholera have never been scientifically studied in India, I had taken the liberty, in consequence of the unprecedented mortality from cholera in the army last season, to call the attention of the Minister of State for India and of the Minister of State for War here to the necessity of having the disease scientifically studied in India, so as to arrive at a rational method of cure. By a letter from Mr. Albert Merchere, assistant-surgeon to the 1st Regiment of Punjaub Rifles, dated Kaher, Nov. 26th, 1861, and inserted in a medical contemporary of the 18th instant, it appears that he confirms the statement I made in my letter above-mentioned; that the etiology and pathology of cholera have never been scientifically studied in India, and that consequently the method of treatment is as empirical now as it was when the disease first attracted notice in India in 1817. He says, "The treatment generally adopted in the north-west provinces and on the Punjaub was opium and stimulants, *calomel in ten-grain doses*, once or twice chloroform, and other stimulants being continued as long as life lasts." As the letter of Mr. Merchere is well written, and as he evidently gives a true account of the medical treatment of the disease, we can thereby easily ascertain what is the amount of knowledge of the etiology and pathology of the disease possessed by the medical profession in India. Therefore, as it is evident from

the above letter that the disease has never been scientifically studied in India, in the interest of humanity and of medical science, permit me to solicit a place for this letter in THE LANCET.

The researches carried on here in 1853-54, publicly, and in the presence, as it were, of the whole medical profession in Great Britain and Ireland, assisted by the valuable information afforded me by the Registrar-General and his department, have established the pathological fact, that, in *every case*, cholera—that is, spasms, vomiting, &c.—is preceded, for a few hours, or for a few days, or for a few weeks, by a diarrhœa; and that if this diarrhœa is early and scientifically treated, it can easily be cured, and the stage of cholera prevented; by which means life will be saved.

And during these researches, another important pathological fact was pointed out,—namely, that where cholera prevails, the functions of the bowels in every individual in the locality are disturbed; so much so, that half, or a third, or a fourth, of the usual purgative medicine will now too often bring on diarrhœa, followed by cholera and fatal collapse.

Therefore, with these facts before us, it is evident that administering doses of ten grains of calomel as a remedy to cure the disease, is as unscientific medical treatment as to attempt to extinguish a conflagration by spirits of wine, and proves that the medical profession in India are not scientifically acquainted with the disease; and it is also evident that it has not been impressed on the military authorities that it is their duty to appoint such an effectual supervision over those under their command, that the first attack of diarrhœa be ascertained and attended to as soon as possible. And therefore the conclusion arrived at in my previous letter—that if the military and the medical officers had known and had done their duty, the country would not have to deplore the loss of so many valuable lives in India last season.

I have the honour to be, Sir, your obedient servant,

D. MACLOUGHLIN, M.D.,
Member of the Legion of Honour.

Bruton-street, Berkeley-square, Jan. 1862.

## STRANGULATED HERNIA IN A PATIENT AGED NINETY-SIX.

*To the Editor of* THE LANCET.

SIR,—The case of strangulated hernia recorded by Mr. Harper, in your impression of the 11th ultimo, brings to my recollection a patient of the age of ninety-six years, on whom I operated successfully. I am unable to find some notes I made at the time, or I would send you a sketch of the case; not that there was anything of interest or importance about it, except the very great age of the patient, and, for that reason, her recovery. I see by my books that it was on May 15th, 1859, I performed the operation. The patient was under treatment about ten weeks; the recovery was then complete. She lived in comfort for many months, and died February 1st, 1860, from decay. I am, Sir, yours obediently,

Lindfield, Sussex, Feb. 1862. W. ELLIOTT PORTER, M.R.C.S.

## PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

THAT the symptoms of amphoric respiration and of gurgling do not of necessity indicate the existence of tubercular consumption and pulmonary excavation, is a fact already established by several authors—MM. Béhier, Barthez, and Rilliet, for example; but, nevertheless, little acknowledged by the generality of writers on lung diseases. In a clinical lecture delivered a few days ago at the Hôtel Dieu, Professor Trousseau drew the attention of his class to a case of catarrhal bronchitis, complicated with recent pleuritic effusion, in which bronchophony, amphoric respiration, and gurgling sounds were very strongly marked, while clearly unconnected at the same time with a pulmonary cavity. About three months back I detailed the views of M. Landouzy on the subject of the unreliability of ægophony as a sign of pleuritic effusion, consequently it will be felt that the already universally accepted views of Laennec are likely once more to return *sub judice* for modification and correction.* Some details of M. Trousseau's case are worthy of record, as illustrating the extreme difficulty of accurate diagnosis in certain apparently simple examples of chest disease. A woman, aged twenty-two, was admitted into the hospital, on the 19th of January, suffering from an attack of acute bronchitis, the commencement of which dated eleven days back. On examination, the right side of the chest presented, on percussion, symptoms of extensive effusion, dulness existing from the base of the lung to a point a little above the nipple. In the opposite side indistinct blowing sounds, with subcrepitant râles, were recognised, and the case was diagnosed as one of acute bronchitis and pleurisy. Above the line of dulness on the right side percussion elicited a very marked resonance, which did not exist at any point on the opposite side of the chest. The organ, where uncompressed by the pleuritic effusion, was, in fact, expanded and bulging. On the third day after admission, dulness was complete on this side, the effusion had become general, and the stethoscope here revealed—on both back and front aspects of the thorax—bronchial breathing, amphoric respiration, and gurgling; in fact, all the sounds of a pulmonary cavity of the most formidable dimensions. As this latter supposition was inadmissible, and as the respiration was laboured, and the general condition of the patient assuming an unfavourable aspect, M. Trousseau, who has already (ever since his first operation of the kind in 1843) derived such satisfactory results from thoracentesis, resolved to puncture, and accordingly withdrew about a pint and three quarters of liquid from the distended pleura. On reapplying the stethoscope to the chest after the operation, the tubular and amphoric breathing, together with the gurgling sounds, had *disappeared*, and the patient expressed her satisfaction at the relief afforded. In spite, however, of the temporary amelioration, the internal inflammatory symptoms progressed, and the case terminated fatally four days subsequently. The post-mortem examination confirmed in a great measure the diagnosis, whilst at the same time it added another element of difficulty to the already obscure pathological history of the malady. The portion of lung, which from its apparent expansion had given so resonant a response on percussion, was indurated and infiltrated with tubercle. I now leave the case to your readers for rumination.

In an official table, lately published, it appears that, according to the census of 1861, the total population of the eighty-nine departments of France amounts to 37,382,325 persons; of whom 18,642,604 are males, and 18,739,721 females. The bachelors muster strong, and make up a total of 10,210,856 individuals; the married men number 7,503,024; the widowers, 928,724. The sum total of spinsters is 9,487,541; of married women, 7,457,115; and of widows, 1,795,065 (a collection of figures which would have given old Mr. Weller the horrors). In the department of the Seine, including, of course, Paris, the total population is 1,953,660; of whom 556,654 are bachelors, 411,163 married men, 36,644 widowers, 439,487 spinsters, 410,527 married women, and 99,185 widows. During the year 1860, 51,056 children were born in Paris, and 41,261 persons died; showing an excess of 9795 births over the number of deaths. Out of the 51,056 children born, 14,092 were natural children. Seven persons of ages between 95 and 100 years died.

To an Englishman, perhaps the most interesting of all the communications sent in to the Academy of Medicine on Tuesday last was a letter from M. Demarquay, surgeon of the Maison Municipale de Santé, in which he informs that learned body that on the Sunday previously he had performed, *à la mode Anglaise*, the operation of ovariotomy. The subject of the disease was nineteen years of age, and possessed of a multilocular cyst which weighed from thirty-six to forty pounds. M. Demarquay not only availed himself of the advice and assistance of MM. Nélaton and Trousseau, but also very wisely transported his patient to St. Germain, so as to escape the influence of the Paris atmosphere. The operation, performed with the aid of chloroform, lasted twenty-five minutes, and the patient, in spite of vomiting and a consequent escape of the pedicle from the clamp, was going on favourably. Apart from the common feeling of humanity, we have a sort of national interest in the success of this case, and I sincerely hope it may terminate favourably.*

M. de Cormenin, a public benefactor of this capital, has just addressed a letter to the Prefect of the Seine on the subject of the baths for the children of the working classes which he has founded. After remarking that the taste for efficient ablution seems to increase considerably in Paris, he states that in 1861 40,553 baths were delivered, constituting an increase on the previous year of 13,646—a decidedly positive result. The *quartiers* which have most eagerly availed themselves of the privilege extended have been those almost exclusively inhabited by the poorer population, whose appreciation of a clean skin seems to be on the increase.

* It will be seen by a paragraph on p. 190, that this case has had a fatal result.—SUB-ED. L.

Some time back (in November) several of the political journals repeated a rumour, stating that a member of the medical profession, residing in the south of France, had usurped the title of Corresponding Member of the Academy of Medicine, such title having actually belonged to his deceased father. M. Pamard, Mayor of Avignon, the victim of this libel, a few days ago obtained a judgment against the offending newspaper, the *Courrier du Dimanche*; and M. Ulbach, the original writer of the article, was mulcted in the sum of 1000 francs, a similar fine being also imposed upon the responsible editor of the same journal, M. Lapp. The *Gazette de France* and the *Charivari* were condemned to pay 500 francs each for having copied the same libel; and all three are obliged to insert the judgment in their own columns. As M. Pamard was at the time candidate for the place of Deputy of the Legislative Body, the original manœuvre partook probably of an electioneering character.

"Pisciculture," says the *Siècle*, "is to water what agriculture is to land; and fishing is the harvest of the former. Water, when well cultivated, is as productive as land. In a large pond near Montmirail, in the Department of the Marne, which was stocked only three years ago, and is now being drained for cultivation, the first haul with the drag-net brought to shore no less than 8000 lbs. weight of fish. Too little attention is paid in France to the conversion of the inland waters into sources of profit. Our 200,000 kilometres of rivers and canals, and over 200,000 hectares of lakes and ponds, rarely exceed an average produce of 20,000,000 of francs yearly—a mere trifle when compared with the 760,000,000 lbs. of butcher's meat constituting the annual consumption."

The *Gazette des Hôpitaux* narrates an interesting case of diabetes mellitus, in which the characteristic lesion of the fourth ventricle was found at the autopsy to be present. The case was that of a young man, twenty-nine years of age, and occurred in the wards of M. Tardieu at the Lariboisière. The malady with its insatiable thirst commenced in 1859, and at its outset was accompanied by symptoms of nervous disorder. Weakness of the left side of the body was perceptible; the patient limped, or rather dragged the left leg; he noticed that the left arm and hand had lost power, and moreover that sensations of creeping occurred in the extremities. The nervous symptoms abated at the end of three months, but the diabetes, in spite of treatment, held on its course. The vision then became affected, and the existence of partial atrophy of the papilla was revealed by the ophthalmoscope, and eventually the patient succumbed to tubercular consumption. At the post-mortem examination, a marked congestion was noticed in the root of the fourth ventricle, towards the "calamus scriptorius," and the calibre of the neighbouring bloodvessels was found to be more voluminous than in the normal condition. No actual disorganization of the cerebral substance was detected. The congestion, as above described, is referred to by M. Luys as the first stage of diabetic cerebral alteration.

M. Chassaignac has published two volumes on the subjects of Suppuration and Surgical Drainage, embracing an aggregate of 1473 pages—a nice little morsel for Messieurs the M.D. grinders to put into their mills.

Paris, Feb. 11th, 1862.

## THE LATE DR. WALLER.

DR. WALLER was born at Guildford on the 2nd of February, 1802, and was educated at the Guildford Grammar School. At the age of fifteen he came to London, and was apprenticed to Mr. Hooper, of Queen-street, Cheapside. He then entered as a student at Guy's and St. Thomas's Hospitals, where he was soon distinguished for the earnestness with which he prosecuted his studies. He commenced practice at the age of twenty-three in Aldersgate-street, and early turned his attention to obstetric medicine, the department in which he afterwards acquired an honourable reputation. He opened a private class at his own house, and gave systematic lectures on midwifery. This class so greatly increased, that in order to find room he was obliged to remove to a larger house in Bartholomew-close. At this period he established a maternity charity, for the purpose of supplying his pupils with cases. He thus continued his courses of private instruction until this mode of teaching was supplanted by the creation of obstetric chairs at the medical schools. Dr. Waller thenceforth lectured on his chosen subject at the late Aldersgate School of Medicine. Here he remained until he was invited to attach himself to St. Thomas's Hospital as assistant physician-accoucheur and lecturer on clinical midwifery. On the resignation of Dr. Cape, he was appointed to the chair of obstetric medicine, and was elected physician-accoucheur to the hospital. These appointments Dr. Waller held to the time of his death. He removed to Finsbury-square in 1841. For sixteen years Dr. Waller also held the office of physician to the Fore-street Dispensary.

As an author, Dr. Waller will be remembered with honour as the editor of Denman's works. The edition published in 1832 was enriched with valuable notes and additions embodying the editor's own experience and describing his practice. He especially described and advocated the use of the long forceps. Thirty years ago, such advocacy was an indication of clear-sightedness and boldness which were not common. There are men of authority who still lend sanction to the ancient prejudice against this most valuable instrument. In this edition of Denman Dr. Waller published a very interesting and valuable memoir on Transfusion as a means of saving lying-in women who were sinking from hæmorrhage. He practised this operation with complete success on many occasions. A revision of this memoir was published in the first volume of the "Obstetrical Transactions." Several minor papers, including a series of cases of Placenta Prævia, intended to illustrate the advantages of Dr. Simpson's plan of total detachment, were published in the medical journals.

Dr. Waller was one of the first vice-presidents of the Obstetrical Society, and always took a warm interest in the prosperity of that institution. He enjoyed a large private *clientèle*, and the confidence of a large body of professional brethren, who brought him a considerable consultation practice. He was remarkable for industry and zealous attention to his professional duties. We are informed that during the week preceding the lamentable accident which caused his death, he was five nights out of bed. His loss will be felt throughout a wide circle. He leaves a widow and seven children. Two of his sons have been educated for the medical profession. The elder son is house surgeon to the Margate Infirmary. May the inestimable heritage of a good name and of a good example ripen into success and reputation!

*** We propose to publish next week a complete surgical account of the singular accident and painfully interesting case of Dr. Waller, drawn up by Mr. Crosbie.

# Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board on the 12th inst.:—

Brumwell, Joseph Cawnley, Burnley, Lancashire; diploma of Membership dated July 28, 1858.
Dobson, Thomas, Fleetwood, Lancashire; Jan. 29, 1862.
Dyte, David Hyman, London Hospital; Nov. 13, 1861.
Edye, Stoward, Heavitree, near Exeter; Dec. 2, 1859.
Fowler, James, St. Thomas's Hospital; April 11, 1861.
Jenner, William, Highworth, Wiltshire; Jan. 31, 1862.
Lewis, Charles, Berehaven Mines, Co. Cork; June 18, 1852.
Marshall, Walter Thomas, Birmingham; Nov. 12, 1861.
Meggy, Frederic, Stockwell; Jan. 28, 1862.
Ray, Robert, Victoria, Australia; Jan. 30, 1862.
Sheppard, William Matthew, Geelong, Australia.
Smith, Joseph, York; July 30, 1861.
Stamper, James Fenton, Haverfordwest; May 1, 1861.
Weekes, William Hampton Carlile, Hurstpierpoint, Sussex; Feb. 3, 1860.
Willett, Edmund, Kennington-park; Jan. 29, 1862.

[In the list of names of gentlemen who were admitted Members of the College on the 28th ult., published in THE LANCET of the 1st inst., *for* John Newcombe, M.D., Victoria College, Toronto, *read* James Newcombe, M.D., Victoria College, Toronto.]

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on the 6th inst.:—

Ashforth, George Morris, Westmill, Herts.
Davies, Lloyd, Llandilo, near Oswestry.
Harvey, William, Penzance.
Jenkyns, Charles, Tuckingmill, Camborne, Cornwall.
Kempe, Charles Patrick, Clingsillack, Cornwall.

The following gentleman also on the same day passed his first examination:—

Goddard, Eugene, St. John's-street-road.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—The following gentlemen, having passed their final examinations, were admitted L.R.C.P.E. and L.R.C.S.E., on the 8th inst.:—

Cowan, William Dudgeon, Musselburgh.
Jackson, Burton, Co. Kerry.
M'Donald, William, Co. Limerick.

And the following gentlemen passed their first professional examination during the recent sittings of the Examiners:—

Addison, Adam, Forfarshire.
Heffernon, Edward, East Indies.
Spence, James A. W., Yorkshire.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen have passed their final examinations, and were admitted Licentiates of the College on the 10th inst.:—

Pullar, William Young, Edinburgh.
Sandison, John, Arbroath.
Suther, James Benjamin Fraser, Edinburgh.
Wilkinson, William Edward, Dublin.

And the following gentlemen passed their first professional examination during the recent sittings of the Examiners:—

Campbell, John, Argyleshire.
Jeffrey, William, Berwickshire.
M'Lean, Donald, Canada West.
M'Leod, Roderick, Skye.
Walker, Thomas, New Brunswick.
Wright, George A., Perthshire.

CAMBRIDGE UNIVERSITY: DOWNING PROFESSOR OF MEDICINE.—Professorial certificate examined and approved on the 3rd inst.:—

Barker, Corpus Christi College.
Carson, Christ's College.
Cart, Trinity College.
Child, Emmanuel College.
Cooke, Trinity College.
Danvers, St. John's College.
Dewe, St. Catharine's College.
Greene, Christ's College.
Hawkins, Trinity College.
Hilleary, St. John's College.
Hodgson, Corpus Christi College.
Maddy, St. John's College.
Maron, St. Catharine's College.
Parton, Trinity College.
Simpson, Trinity College.
Townend, Trinity College.
Vernon, Corpus Christi College.
Wilkins, St. John's College.

DEATH OF LOUIS XVIII.'s SURGEON.—Baron Thévenot, formerly attached to the court of Louis XVIII., has just died at a very advanced age. He had for many years completely retired from active life.

THE FRENCH EXPEDITION TO MEXICO.—The medical staff connected with this expeditionary corps is composed of eight officers, of whom M. Ludger Lallemand is the chief. There are also three pharmaciens attached to this staff.

CHOLERA AT PERNAMBUCO.—Some anxiety prevailed at Pernambuco in consequence of an epidemic, reported to be cholera, having made its appearance at some villages in the northern part of the province.

FATAL EXPLOSION OF FIRE-DAMP.—An explosion of fire-damp took place lately in the coal mine of Bellevue d'Ameraccour, near Charleroy. Five men were killed and fourteen wounded. The wonder is that the disaster was not greater, as there were 200 men in the pit at the time the explosion took place.

LEGACIES TO HOSPITALS.—The following hospitals and infirmaries have received charitable consideration by the will of the late Mrs. Mary Massie, late of Royal-crescent, Bath:—Cheltenham, £500; Inverness and Dingwall, each £200. The institutions at Bath—namely, the General Hospital, £250; Western Dispensary, Monmouth-street Society, and the Asylum for the Deaf, Dumb, and Blind, £200 each; the Asylum for Idiots, £100.

CITY DISPENSARY.—The seventy-third annual festival of this dispensary (Queen-street, Cheapside) was held at the London Tavern. Instituted as far back as 1789, its ministrations have since that time cured or relieved 445,444 persons, in addition to 121,000 visits being paid by its medical officers. During the past year, 13,297 patients have been gratuitously attended, and 3000 have been visited at their own homes, at the moderate cost of £764 6*s.* 10*d.* This expenditure, though so small, exceeds the receipts by a large sum.

MIDDLESEX HOSPITAL.—At a general meeting of the governors of this excellent institution, on the 13th inst., Mr. J. M. Arnott in the chair, convened for the purpose of electing an Assistant-surgeon, in the vacancy occasioned by the appointment of Mr. Flower as Conservator of the Museum of the Royal College of Surgeons, Mr. John Whitaker Hulke, Assistant-surgeon of King's College Hospital, was unanimously appointed to the vacant post, thus creating another vacancy in the surgical staff of the latter institution.

ROYAL FREE HOSPITAL.—The annual general court of the governors of the Royal Free Hospital was held in the board-room of the institution on the 6th instant. The secretary read the report, which entered at length into the working of the hospital during the year. The following is an abstract of that document:—"The past year has been a very successful one, inasmuch as the receipts of the charity have, with the balance previously in hand, amounted to £9163 16*s.* 6*d.*, which has enabled the committee to clear off the balance of a mortgage which has weighed heavily on the resources of the institution. The hospital is rapidly emerging from debt, and the committee confidently depend upon being able to make a large addition to the accommodation for in patients in the course of the present year. The medical report shows that nearly 100 beds have, during the year, been kept constantly occupied, which has enabled the medical officers to admit into the wards 1015 poor diseased persons, besides 175 cases of severe accident—making a total of 1190 in-patients. In addition to this number, 50,496 of the destitute sick poor have been admitted as out-patients, besides the number remaining on the books at the close of the previous year. The number of attendances by poor persons requiring advice and medicine during the year, has been no less than 149,015." The annual expenditure was given at £8998 0*s.* 2*d.* The report of the committee concluded by warmly eulogising the great services which had been rendered to the hospital by the physicians and surgeons.

SOME of the officers and men of the troops recently dispatched to Canada have been frostbitten, and one, it is feared, will lose his hand.

OVARIOTOMY IN PARIS.—On the 2nd inst., M. Demarquay, by the wish of Messrs. Nélaton and Trousseau, operated upon a young woman, nineteen years of age, affected with ovarian dropsy. She had been tapped once, and the cyst, which was found to be multilocular, soon refilled. Her size had become enormous, and to give the patient every chance, M. Demarquay had her conveyed from his hospital to St. Germain, a healthy locality near Paris. The steps of the operation were regulated upon the mode of procedure usual in this country, Mr. B. Brown's clamp being applied. Everything went on favourably until the second day, when the clamp fell off during a fit of vomiting. She died in the evening of the 5th, during a fainting fit. There were several quarts of sanguineous serum in the peritoneum, which effusion took place suddenly, probably in consequence of the falling off of the clamp.

ROYAL MATERNITY CHARITY.—At the annual general court of governors of this Charity, held at the offices, No. 2, Chatham-place, Blackfriars, Dr. Geo. D. Longstaff chairman, the report stated that the finances of the Charity necessitated a reduction in the allotted number of recommendatory tickets. In the year 1860, 3780 patients had received the assistance of this institution; and last year that number had been increased to 4110, out of which only 11 deaths had occurred, and 3 of those were from previous organic disease, thus reducing the number of really puerperal casualties to 8, or 1 in 514 cases. The Superannuation Fund, established in 1839 for the succour and assistance of the Charity's midwives when disabled by age or infirmity, had received an addition to its capital stock of £41 19*s.* 2*d.*, the surplus of income after paying annuitants, of whom at present there were 3. At the commencement of the year the Charity was in arrear £200 0*s.* 7*d.* As the year progressed, in consequence of the still increasing demand, and a depreciation of the income of the institution to the extent of £118 (from funded stock), they had to borrow £200, which, with £300, previously borrowed to purchase the lease of their present premises, and a deficiency of £142 19*s.* 5*d.* on the year's accounts, made a total deficit of £642 19*s.* 5*d.* This large deficiency was caused mainly by the enormous increase in the number of patients. The report was adopted, and the proceedings terminated by re-electing the auditors and committee, and passing a vote of thanks to the chairman.

ACTION FOR LIBEL.—Mr. S. Wells has obtained damages to the extent of £300 in an action in the Court of Queen's Bench against William Webber, a surgeon, late of Norwich, now of Tunbridge Wells, for a libel published by the latter in an obscure medical periodical.

DEATH OF M. SEUTIN.—This distinguished surgeon, well known for his valuable inventions relative to starch bandages, and who may be said to have been at the head of Belgian surgery, has just died at Brussels, from organic disease of the heart. M. Seutin had for a long period been professor at the Faculty of Medicine, and had gained for himself a well-earned reputation. He was a member of the Senate, and wore

the orders of almost every country. King Leopold had created him a baron. He departed this life covered with distinctions, and followed by the regret of his professional brethren and the nation at large.

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, FEBRUARY 8TH.—The mortality of London last week exhibited a decrease on that of some previous weeks, in two of which since the beginning of the year the deaths rose above 1560. Last week the number was 1384, differing but slightly from the estimated amount. Typhus was fatal in 63 cases. Scarlatina prevailed more than any other of the epidemic diseases; it carried off 82 children, and diphtheria 22. There were 178 deaths last week from bronchitis, whilst pneumonia numbered only 49. A stable-boy died in Guy's Hospital from glanders.

The births were—Boys, 1095; girls, 1102. Total, 2197.

## MEDICAL VACANCIES.

THERE are vacancies for a Physician, and for a Surgeon in the Honorary Staff, to the Farringdon General Dispensary and Lying-in Charity.

The office of House-Surgeon to the Windsor Royal Dispensary is now vacant.

A House-Surgeon and Dispenser is required for the Chesterfield and North Derbyshire Hospital.

The election of a Resident Surgical Officer to the Birmingham General Hospital, in the room of Mr. W. P. Goodall, resigned, will take place on the 14th proximo.

The election of a District Medical Officer for the Whittlesey Union will take place on the 25th inst.

There is a vacancy for an Honorary Physician to the Infirmary and Dispensary, Bradford, Yorkshire, by the death of Dr. Thomas Lockley.

## MEDICAL APPOINTMENTS.

MR. HENRY SMITH, Assistant-Surgeon at King's College Hospital, has been elected Consulting Surgeon to the Westminster General Dispensary, Gerrard-street, Soho, having filled the office of Honorary Surgeon to the Institution for ten years.

Mr. Frederick Wm. Spurgin has been appointed House-Surgeon to the Poplar Hospital, vice Mr. M. Brownfield, resigned.

Assistant-Surgeon C. J. Kirwan has been appointed by the Indian Government to the Medical Charge of the Divisional Jail, Government Dispensary, and Civil Station of Seetapore, in Oude, and of the 10th Regiment of Oude Police.

Dr. Edwyn Andrew, late Resident Medical Officer to University College Hospital, has been appointed Surgeon to the Shrewsbury Eye and Ear Dispensary, rendered vacant by the death of Mr. Edwin Foulkes.

Dr. Thomas James Walker has been elected Surgeon, and Mr. John W. Pearce Consulting Surgeon, to the Peterborough Infirmary and Dispensary.

Dr. Wm. Henry Stone has been appointed Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, vice Dr. James Edward Pollock.

Dr. James Hollins Pickford has been appointed Physician to the Sussex and Brighton Infirmary for Diseases of the Eye, vice Dr. Henry Moon, resigned.

Mr. Lawrence Alfred Renaham has succeeded Mr. Joseph Barrett as Surgeon to the Finglas and Glasnevin Dispensary Districts, in the North Dublin Union.

Mr. Henry Thomas Marsh has been appointed Medical Officer for the Parishes of Berrow, Birtsmorton, Bushley, Castlemorton, and Longdon, in the Upton-upon-Severn Union, Worcestershire.

Mr. John Wm. Irvine has been elected Honorary Surgeon to the Liverpool Dispensaries.

## MILITARY MEDICAL INTELLIGENCE.

Royal Artillery: Staff Assist.-Surg. Andrew Knox Rickards, to be Assist.-Surg., vice Sharp, resigned.

6th Foot: Staff-Surg. George Edwin Gains, to be Surg., vice Miller, appointed to the Staff.

47th Foot: Staff Surg.-Major Alexander Smith, M.D., to be Surg., vice Singleton, dismissed the service by the sentence of a general Court Martial.

100th Foot: Staff Assist.-Surg. Thomas Michael O'Brien, to be Assist.-Surg., vice Thomas Liddiard, who resigns.

Deputy Inspector-General of Hospitals Thomas David Hume, M.D., to be Inspector-General, vice John Forrest, M.D., C.B., placed upon half-pay.

Surg. Colin Matheson Milne Miller, M.D., from the 6th Foot, to be Staff-Surg., vice Gains, appointed to the 6th Foot.

To be Staff Assistant-Surgeons: Staff Assist.-Surg. Patrick Quinlan, from half-pay, vice Rickards, appointed to the Royal Artillery; Staff Assist.-Surg. Samuel Gamble White, M.D., from half-pay; Staff Assist.-Surg. Henry Lamb, from half-pay, vice O'Brien, appointed to the 100th Foot.

Brevet.—Surg.-Major James Webster Winchester, retired on full-pay from her Majesty's Indian Military Forces, to have the honorary rank of Deputy Inspector-General of Hospitals.

Commissions signed by Lords-Lieutenant.—3rd Administrative Bat. of Cheshire Rifle Volunteers: John Hamilton Larmuth, Gent., late Honorary Assist.-Surg. to 28th Company Cheshire Rifle Volunteers, to be Assist.-Surg.

1st Administrative Bat. of Suffolk Rifle Volunteers: John Thomas Muriel, Gent., to be Assist.-Surg.

# Births, Marriages, and Deaths.

## BIRTHS.

On the 30th January, at Corfu, the wife of Dr. F. W. Innes, C.B., Deputy Inspector-General of Hospitals, of a daughter.

On the 8th inst., at Hampstead, the wife of H. Cooper Rose, M.D., of a son.

On the 9th inst., at Bootle, near Liverpool, the wife of Henry M. Rowland, Esq., M.R.C.S., of a son.

On the 9th inst., the wife of Edward G. Clarke, Esq., M.R.C.S., of Mold, Flintshire, of a son.

On the 10th inst., at Belton House, Pensford, the wife of Henry B. Dew, L.R.C.P., of a son.

## MARRIAGES.

On the 5th inst., at Trinity District Church, St. Marylebone, John Sheldon Furlong, M.D., Surgeon 42nd Royal Highlanders, to Florence Frances, youngest daughter of the Rev. Edward J. Ward, Rector of East Clandon, Surrey.

On the 6th inst., at East Budleigh, Devon, Andrew Brazie, L.R.C.P.E. and L.F.P.S.G., of Lympstone, Devon, to Mary, only surviving daughter of the late Edward Guppy, Esq., of Golacre House, Farway, Devon.

## DEATHS.

On the 7th ult., at the Dispensary, Ripon, Thomasinia Lavinia, the wife of Wm. Atkinson, Esq., Resident-Surgeon.

On the 27th ult., at Minto-street, Edinburgh, James Colquhoun, M.D., late of the 1st Madras Light Cavalry.

On the 2nd inst., at Cherry-bank, near Edinburgh, Ann Bannatyne, wife of William Finlay, M.D.

On the 3rd inst., at Suffolk-square, Cheltenham, Dr. George Lamb, late Physician-General to the Bengal Army, aged 75.

On the 4th inst., at Atherstone, Jane, the wife of S. M. Hallsworth, Esq., M.R.C.S.

On the 8th inst., at Burton-on-the Water, Gloucestershire, Nathaniel Stenson, M.D., aged 66.

# Medical Diary of the Week.

**MONDAY, FEB. 17**

- ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M.
- ROYAL FREE HOSPITAL.—Operations, 2 P.M.
- METROPOLITAN FREE HOSPITAL.—The following Operation will be performed at 2 P.M.:—By Mr. G. B. Childs: Lithotomy.
- ROYAL COLLEGE OF PHYSICIANS OF LONDON.—8½ P.M. Dr. Lionel S. Beale, "On the Anatomy of the Liver, with Observations on Certain Changes occurring in Disease."
- MEDICAL SOCIETY OF LONDON.—8½ P.M. Lettsomian Lectures on Surgery, by Mr. Henry Thompson. Lecture II. Lithotomy and Lithotrity.

**TUESDAY, FEB. 18**

- GUY'S HOSPITAL.—Operations, 1½ P.M.
- WESTMINSTER HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Mr. John Marshall, "On the Physiology of the Senses."
- ETHNOLOGICAL SOCIETY.—8 P.M. Mr. John Crawfurd, "On the Civilization and Affiliation of the Races of Man from the Evidence of their Systems of Numeration."—Mr. W. Bollaert and Don Ramon de Silva Ferro, "On the Idol Human Head of the Jivaro Indians of Ecuador."
- JUNIOR MEDICAL SOCIETY OF LONDON.—7 P.M. Council Meeting at St. Thomas's Hospital.—8 P.M. Mr. John F. Deck, "On Disease of the Kidney consequent upon Scarlatina."
- PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.

**WEDNESDAY, FEB. 19**

- MIDDLESEX HOSPITAL.—Operations, 1 P.M.
- ST. MARY'S HOSPITAL.—Operations, 1 P.M.
- UNIVERSITY COLLEGE HOSPITAL.—Operations 2 P.M.
- ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

**THURSDAY, FEB. 20**

- ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
- CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
- LONDON HOSPITAL.—Operations, 1½ P.M.
- GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 3 P.M.
- LONDON SURGICAL HOME.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat."

**FRIDAY, FEB. 21**

- WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
- ROYAL INSTITUTION.—8 P.M. Mr. Jas. Fergusson, "On the Site of the Holy Sepulchre in Jerusalem."
- WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.—8 P.M. Dr. Sansom, "On the Administration of Chloroform."
- GEOLOGICAL SOCIETY OF LONDON.—Anniversary.

**SATURDAY, FEB. 22**

- ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.
- ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
- KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
- CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Rev. A. J. D'Orsey, "On the English Language."
- CHRISTIAN MEDICAL ASSOCIATION.—8 P.M. Meeting at Freemasons' Hall.

## THE LANCET INQUIRY
ON THE
## INFLUENCE OF RAILWAY TRAVELLING UPON PUBLIC HEALTH.

**IN THE LANCET of March 1st, 1862, will appear the concluding Report on this important subject; embracing the general results of the investigations made by the Commission, with the alterations and precautions necessary for the health and safety of persons travelling by Rail.**

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# To Correspondents.

*Physiologist* (A—n) puts an interesting question—viz., Will a man live longer immersed in warm or in cold water? All we can say is, that in the longest case upon record of immersion with subsequent recovery, the sufferer was immersed in ice-cold water. We refer to Dr. Garratt's (Boston, U.S.) case, in which it was believed the patient had been submerged above twenty minutes. How much above is uncertain. The longest case next to this will be found reported in the *London Medical Gazette* for December, 1843. Here the body was fourteen minutes under water. The experiments of Drs. Edwards and Marshall Hall throw much light upon this question. Our correspondent should read Dr. Marshall Hall's book on Asphyxia and Drowning.

*Nemo* must obtain the permission of the authorities.

*R. R. S.*—Durande strongly recommended a mixture of ether and turpentine in hepatic colic from the irritation of biliary calculi. M. Bouchut has more recently advised the substitution of chloroform for ether in the composition of the formula in question. We believe that some well-known French practitioners speak favourably of its efficacy.

*P. S.*—He is not prohibited from practising in country districts.

*A. B. C.*—In the event of the regulation being carried out shortly, the preliminary examination will be necessary.

*Anxious Enquirer* shall receive a private note if he will forward his address.

The use of the instrument named is not at all requisite.

*Visitor* will be admitted on the presentation of his card.

*Mr. J. H. H.* (Manchester) should consult some respectable practitioner in the town.

MIND AND MATTER.

*To the Editor of* THE LANCET.

SIR,—For various reasons, the practice of supplying their own patients with medicines must necessarily continue to be followed by a large majority of the profession; and so long as this system prevails upon its present footing, it also results that frequent misunderstandings must take place between these gentlemen and their clients. Why? Because the scale of charges is not a fixed one; and for the reason that the public are unthinking, and too ready to look upon transactions with their medical advisers from a mercantile point of view, and to consider that they are paying an exorbitant price for drugs of little value.

Divines and lawyers are not above the regulation of fixed legal charges. Why should the general practitioner of medicine not obtain similar advantages? So long as we continue to charge at all for drugs, so long shall we be considered as petty tradesmen. Let us repudiate all dealing in drugs, charge only for advice and visits, and end all chance of litigation by a fixed and legalised scale of remuneration. The public would be satisfied in knowing what they had to pay, and the more readily employ and more justly appreciate their medical attendants.

Yours, &c.,
Feb. 1862. C. M.

*Surgeon, R.N.*—The best suggestion which we have heard of for preventing instruments from rusting is of American origin. It is to apply on them a solution of white wax in benzine. The latter evaporates, leaving a very thin coating of wax, which acts as a sure protection to the metal. When the wax has to be removed, the instrument should be gently heated, and the wax wiped off with a piece of soft lint.

*Tempus Fugit.*—After the expiration of his term of apprenticeship.

*Spectator.*—There is, no doubt, considerable force in the observations of our correspondent; but the complaint he makes against the conduct of some of the students during the performance of operations at University College Hospital would, if inserted in their present form, be offensive.

If *J. M.* will forward his name and address, he shall receive a private answer to his question.

TEST FOR THE PURITY OF THE AIR.

*To the Editor of* THE LANCET.

SIR,—In your article on Railway Travelling and its Influence on Health, in THE LANCET of Jan. 11th, Dr. Angus Smith speaks of using a solution of a permanganate as a test for the purity (or rather impurity) of the air. I should feel greatly obliged if you would tell me how the above solution is used, and of what strength, or if you could refer me to any work where the method is described.

I am, Sir, yours truly,
February, 1862. MEDICUS.

*** We believe Dr. Angus Smith's description of this valuable method of testing air was published in the *Journal of the Society of Arts*. It would, we are sure, be highly acceptable to many besides our correspondent if Dr. Smith would give a detailed description in THE LANCET.—ED. L.

*M.R.C.S.*, (Lichfield.)—A "registered medical practitioner," whose qualifications were obtained before Jan. 1st, 1861, would be examined on the Principles and Practice of Medicine and Midwifery; but he would be exempt from examinations on such other branches of medical knowledge as his qualifications may seem to the Examiners to justify.

*A. B.*—No charge is made.

*Mr. F. L. B. Dykes*, (Cockermouth.)—The cases referred to were described in a paper "On Ectropion," by Mr. Wordsworth, in THE LANCET of September 5th, 1857, p. 242. They were three in number, and very severe, following exfoliation of the edge of the orbit. In all three the upper lid was contracted, and adherent to the bony circumference of the orbit, and in each the same general plan of treatment was successfully adopted.

*Patiens.*—The gentleman named holds a high position in the profession.

ST. THOMAS'S HOSPITAL.

*To the Editor of* THE LANCET.

SIR,—Having observed in your leading article of last week a statement to the effect that some of the wards in St. Thomas's Hospital contain only 6 or 8 beds, I beg leave to state that, with the exception of the ophthalmic ward, which contains only 13, there is no ward in the hospital with less than 18 beds. The great majority contain between 23 and 35 beds.

I am, Sir, your obedient servant,
St. Thomas's Hospital, Feb. 1862. A DRESSER.

*Dr. Tanner* will find the information he requires in the second volume, folio, of the works of Fabricius Hildanus.

*Mr. Philipson's* communication arrived too late for insertion this week. It shall appear in our next.

*M. D. S.*—It is doubtful whether the licence would be of any service to him.

*A Subscriber, W. B.*—We will endeavour to procure a copy of the rules, and forward them to our correspondent.

*H. G. W.*—He will be required to pass the preliminary examination.

*Studens.*—It will be found described in all the elementary works on Anatomy.

THE MEDICAL REGISTER.

*To the Editor of* THE LANCET.

SIR,—Is the Medical Register defunct this year? Surely the profession has a right (with the facilities for printing possessed) to expect its appearance in the first month of the new year.

I am, Sir, yours obediently,
February, 1862. A SUBSCRIBER TO THE LANCET.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Hunt; Dr. Stephen Ward; Mr. Henry Thompson; Mr. E. Porter, Lindfield, Sussex; Dr. Stewart, Belfast; Dr. Langdon Down, Earlswood, Red Hill; Mr. Griffin, Weymouth; Mr. Keith Macdonald, Wrexham; Mr. Watson, Pool, (with enclosure;) Mr. Hilditch, Brighton, (with enclosure;) Mr. H. Chapman, (with enclosure;) Mr. J. T. Williams; Mr. W. Ball, Stockport; Mr. J. Kepsher; Mr. R. G. Wollaston, Schrivenham; Dr. Byrne; Mr. H. Such, Peterborough; Mr. W. H. Blenkinsop, Binfield; Mr. J. H. Henson, Manchester; Dr. E. H. Marshall, Kelvedon; Dr. Harnson, Lincoln; Mr. E. Rawson, Thornton; Mr. E. Paddock, Hanley, (with enclosure;) Dr. Knox; Mr. J. H. S. May, (with enclosure;) Mr. R. Hordley; Dr. R. Cox, Chesham, (with enclosure;) Mr. H. M. Rowland, Bootle; Mr. Jas. Bell; Dr. Hastings, Cheltenham; Mr. A. Guthrie, Ardrossan; Mr. R. Milner, (with enclosure;) Dr. Johnson, Tettenhall, (with enclosure;) Mr. J. Burnett; Mr. H. Dew, Pensford; Mr. F. Hornlman, (with enclosure;) Mr. W. West, (with enclosure;) Mr. H. B. Hudiman, (with enclosure;) Mr. E. H. Philipson, Newcastle; Mr. J. Prod. Whittlesey; Mr. A. C. Ayres, Ramsgate; Mr. S. Whitford; Mr. W. Linford, Exeter, (with enclosure;) Mr. A. Jenkins, Penlie; Mr. J. W. Graves, (with enclosure;) Mr. F. W. Spurgin; Ethnological Society; Physiologist; Patiens; Royal College of Physicians; D. E. P.; Anxious Enquirer; J. M.; H. G. W.; T. H.; A Subscriber; Royal Institution; Parochial Board; A Dresser; &c.